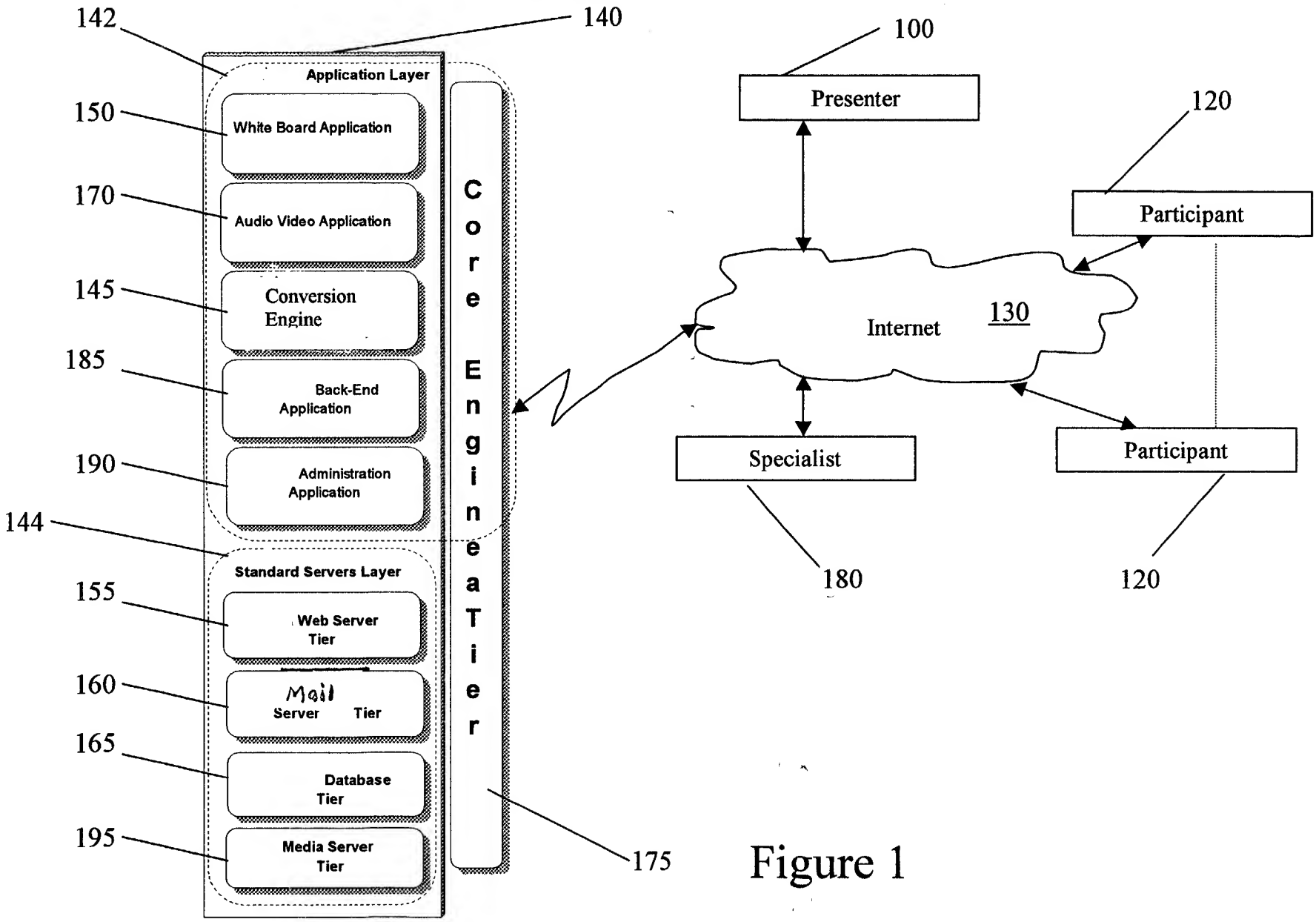
142
140
Application Layer
150
White Board Application
170
Audio Video Application
145
Conversion Engine
185
Back-End Application
190
Administration Application
144
Standard Servers Layer
155
Web Server Tier
160
Mail Server Tier
165
Database Tier
195
Media Server Tier
Core Engine Tier
175
100
Presenter
120
Participant
Internet
130
Specialist
180
Participant
120

Figure 1

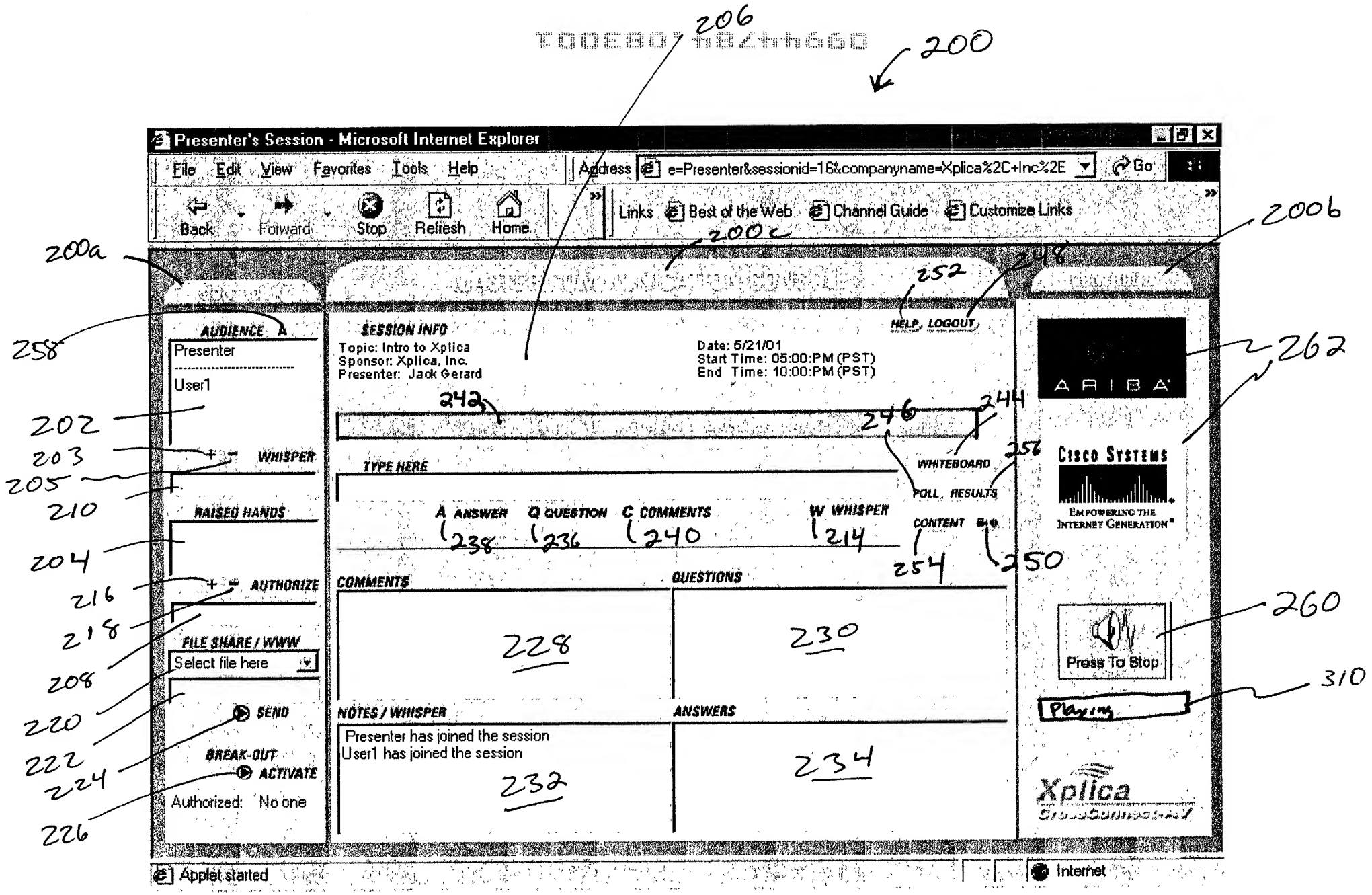
206
200
Presenter's Session - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address e=Presenter&sessionid=16&companyname=Xplica%2C+Inc%2E
Go
Back Forward Stop Refresh Home
Links Best of the Web Channel Guide Customize Links
200a
200c
200b
AUDIENCE
Presenter
User1
WHISPER
RAISED HANDS
AUTHORIZE
FILE SHARE / WWW
Select file here
SEND
BREAK-OUT
ACTIVATE
Authorized: No one
SESSION INFO
Topic: Intro to Xplica
Sponsor: Xplica, Inc.
Presenter: Jack Gerard
Date: 5/21/01
Start Time: 05:00:PM (PST)
End Time: 10:00:PM (PST)
HELP LOGOUT
TYPE HERE
A ANSWER
Q QUESTION
C COMMENTS
W WHISPER
WHITEBOARD
POLL RESULTS
CONTENT
COMMENTS
QUESTIONS
NOTES / WHISPER
Presenter has joined the session
User1 has joined the session
ANSWERS
ARIBA
CISCO SYSTEMS
EMPOWERING THE INTERNET GENERATION
Press To Stop
Playing
Xplica
Applet started
Internet
202
203
205
210
204
216
218
208
220
222
224
226
258
242
246
244
252
248
256
254
250
262
260
310
228
230
232
234
236
238
240
214

Fig 2

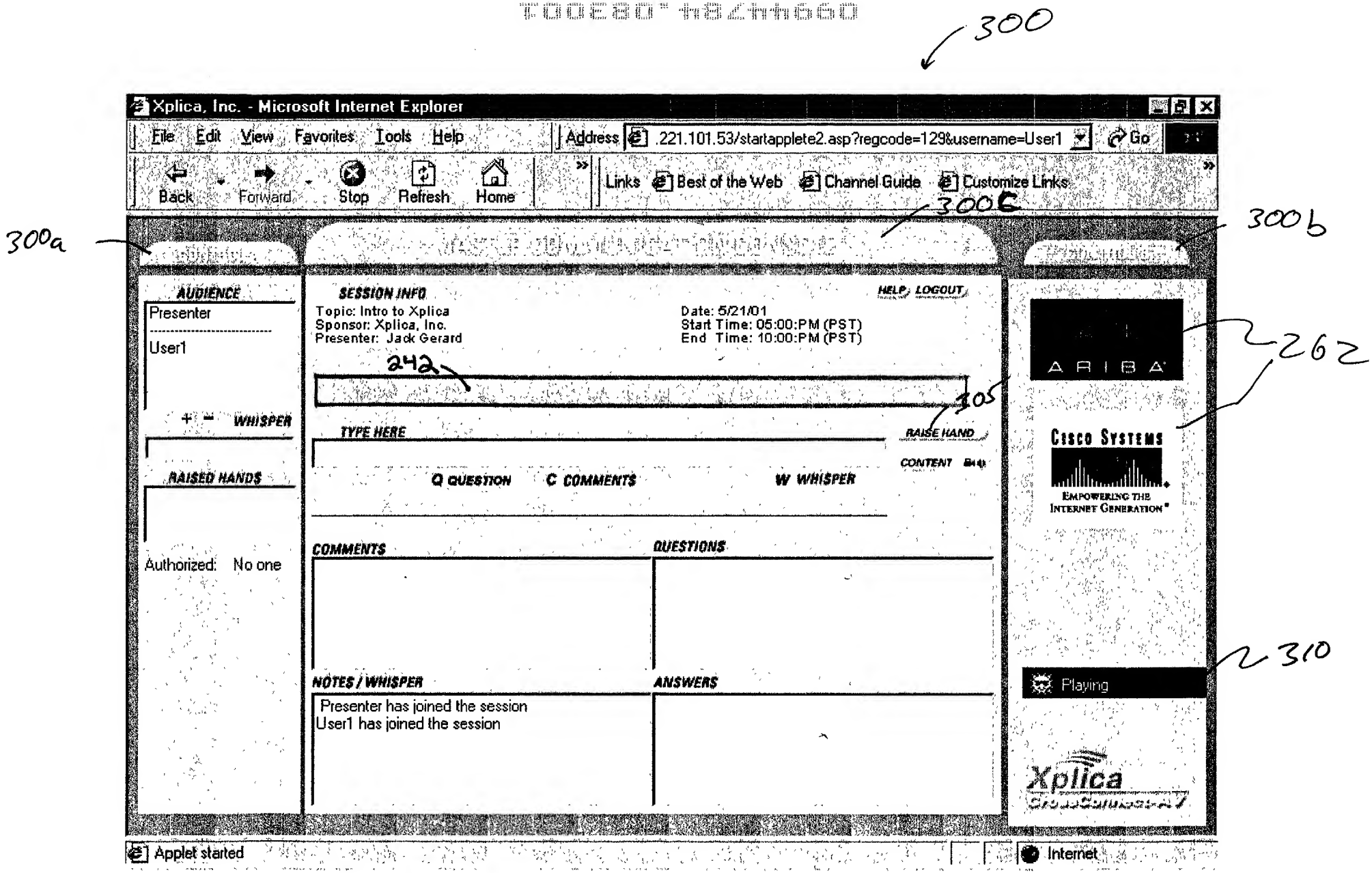
300
Xplica, Inc. - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address .221.101.53/startapplete2.asp?regcode=129&username=User1
Go
Back Forward Stop Refresh Home
Links Best of the Web Channel Guide Customize Links
300a
300c
300b
AUDIENCE
Presenter
User1
+ − WHISPER
RAISED HANDS
Authorized: No one
SESSION INFO
HELP LOGOUT
Topic: Intro to Xplica
Sponsor: Xplica, Inc.
Presenter: Jack Gerard
Date: 5/21/01
Start Time: 05:00:PM (PST)
End Time: 10:00:PM (PST)
242
305
TYPE HERE
RAISE HAND
CONTENT
Q QUESTION C COMMENTS W WHISPER
COMMENTS
QUESTIONS
NOTES / WHISPER
ANSWERS
Presenter has joined the session
User1 has joined the session
ARIBA
262
CISCO SYSTEMS
EMPOWERING THE INTERNET GENERATION
310
Playing
Xplica
Applet started
Internet

Fig 3

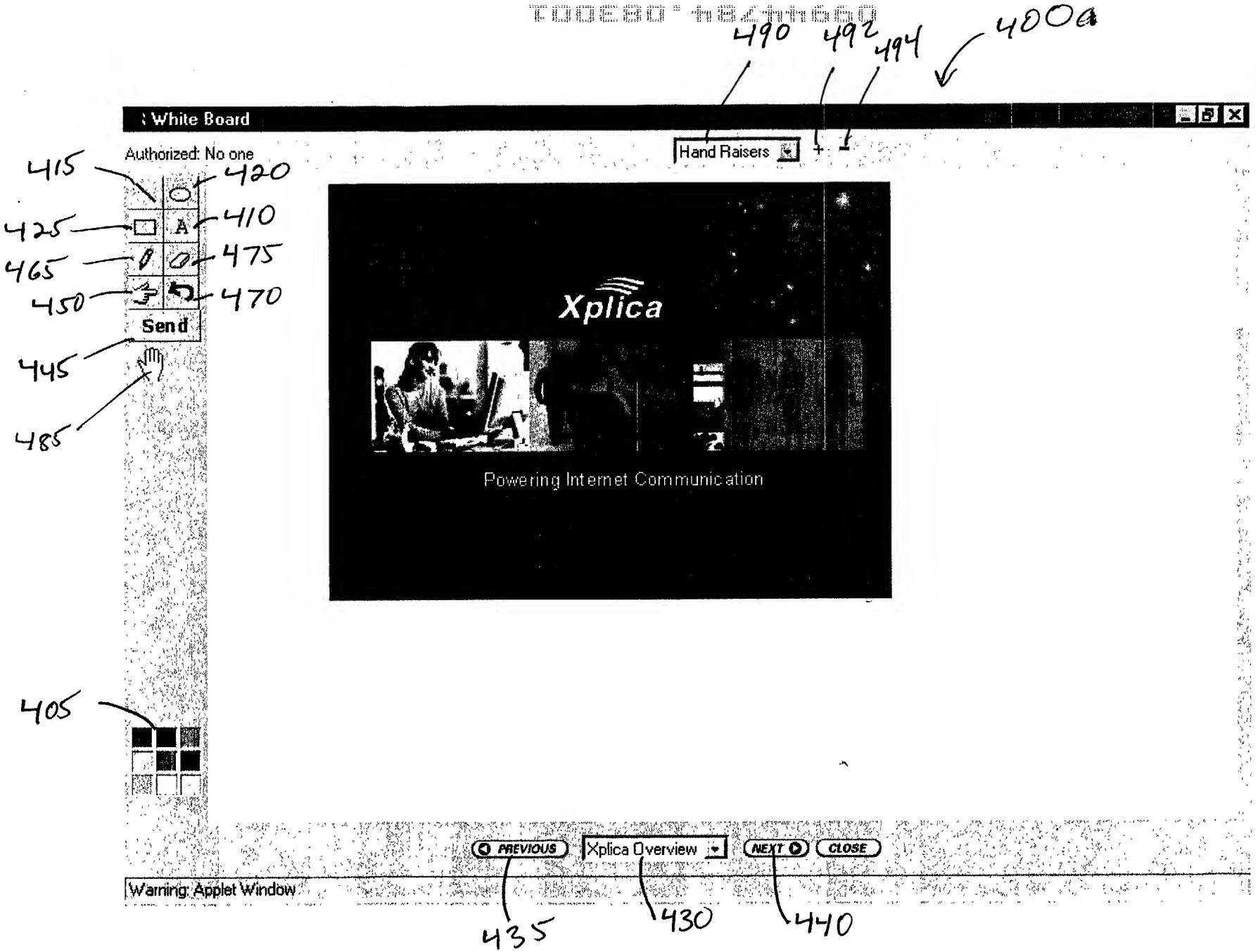
White Board
Authorized: No one
Hand Raisers
Xplica
Powering Internet Communication
Send
PREVIOUS
Xplica Overview
NEXT
CLOSE
Warning: Applet Window
415
420
425
410
465
475
450
470
445
485
405
490
492
494
400a
435
430
440

Fig 4a

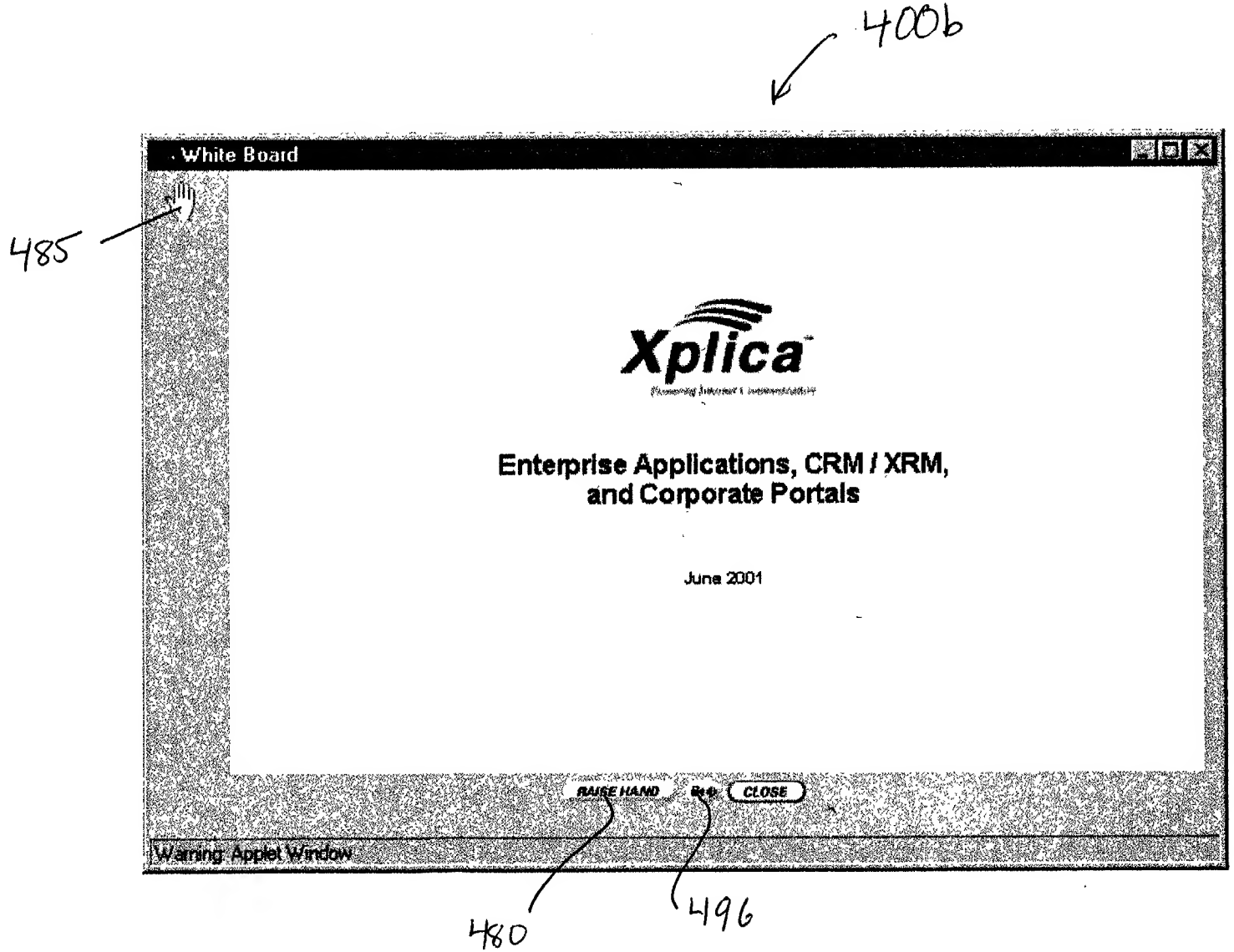
400b
White Board
485
Xplica
Enterprise Applications, CRM / XRM,
and Corporate Portals
June 2001
RAISE HAND
CLOSE
Warning: Applet Window
480
496

Figure 4b

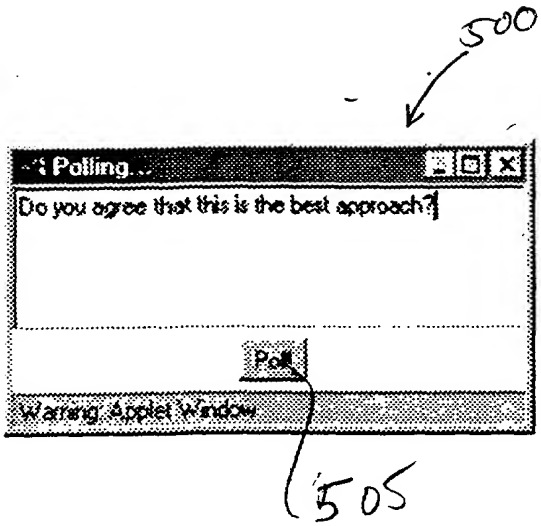
500
Polling...
Do you agree that this is the best approach?
Poll
Warning: Applet Window
505

Figure 5a

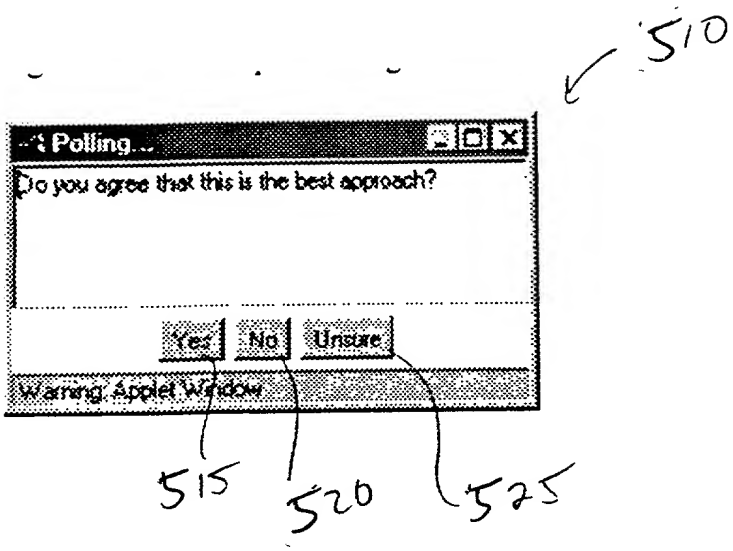
510
Polling...
Do you agree that this is the best approach?
Yes
No
Unsure
Warning: Applet Window
515
520
525

Figure 5b

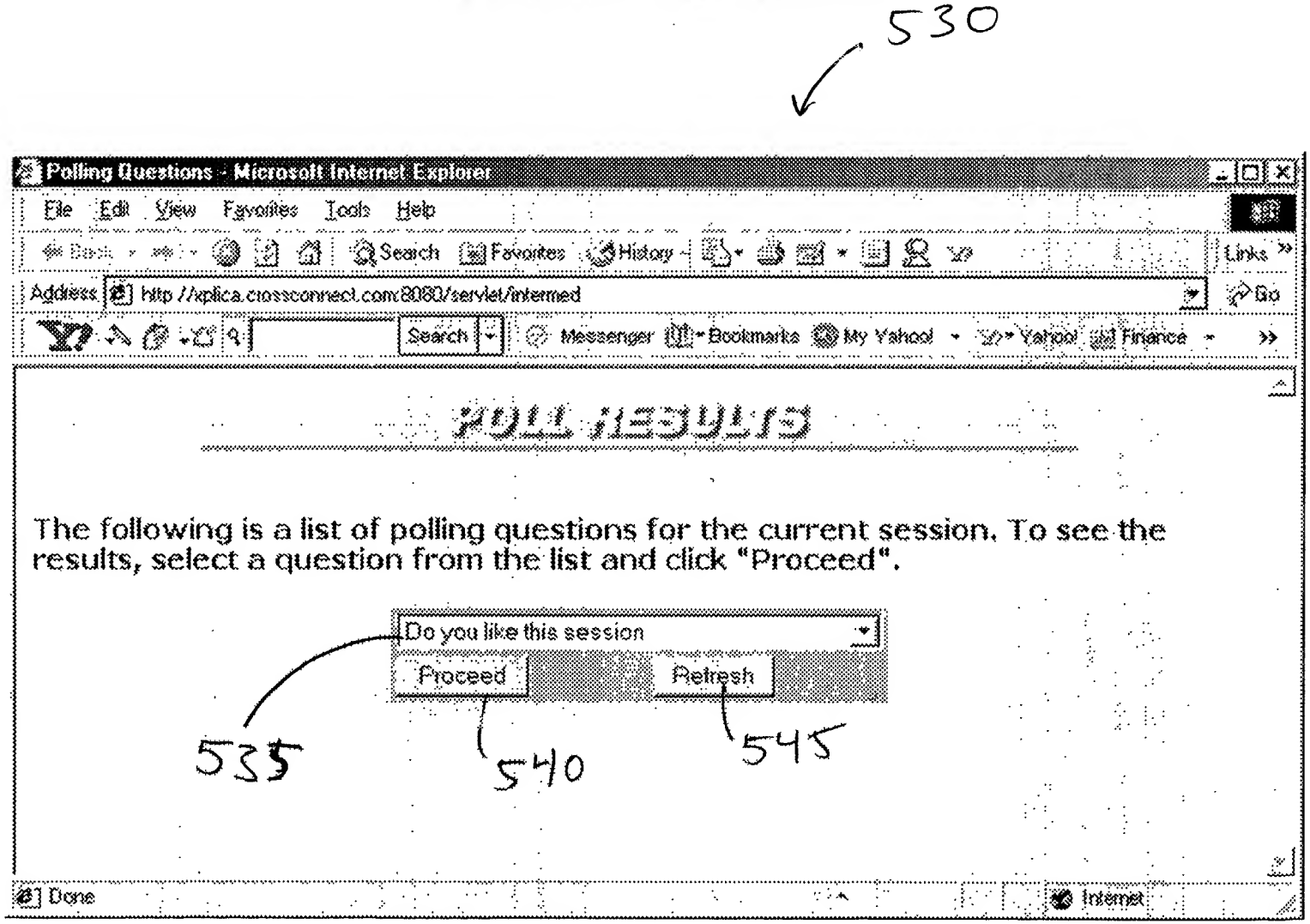
530
Polling Questions - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Search Favorites History
Address http://xplica.crossconnect.com:8080/servlet/internmed
Go
Search
Messenger Bookmarks My Yahoo! Yahoo! Finance
POLL RESULTS
The following is a list of polling questions for the current session. To see the results, select a question from the list and click "Proceed".
Do you like this session
Proceed
Refresh
535
540
545
Done
Internet

Figure 5c

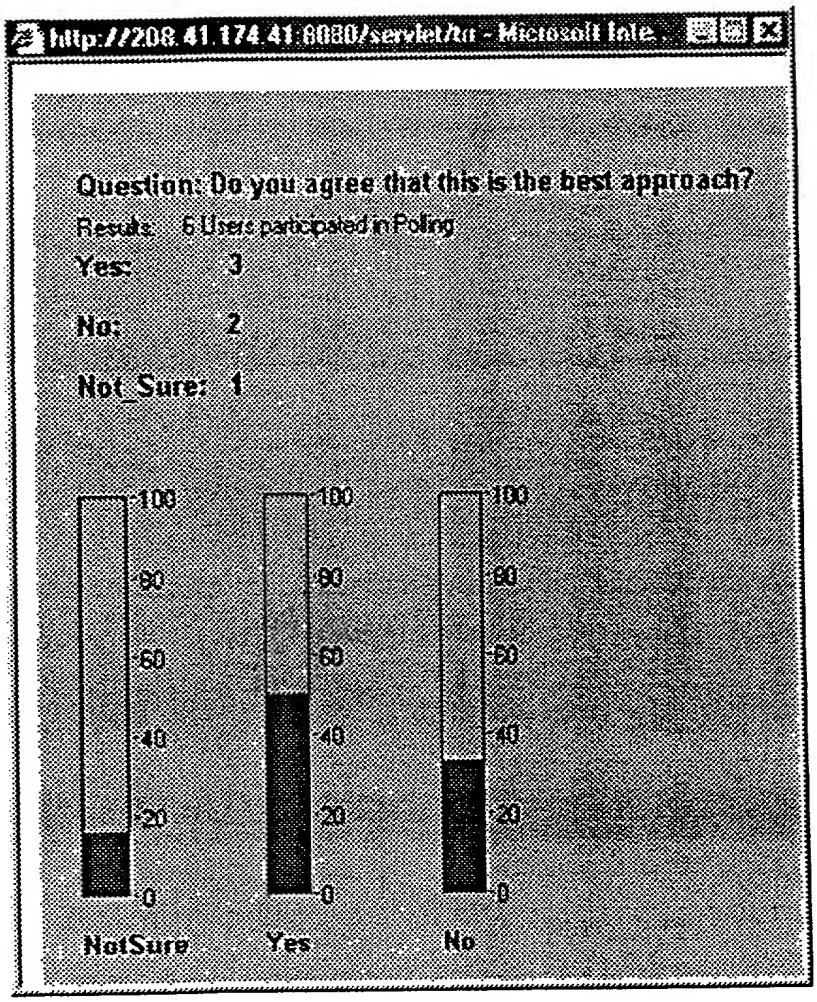
http://208.41.174.41:8080/servlet/to - Microsoft Inte
Question: Do you agree that this is the best approach?
Results: 6 Users participated in Poling
Yes: 3
No: 2
Not_Sure: 1
100
80
60
40
20
0
NotSure
Yes
No

Fig. 5d

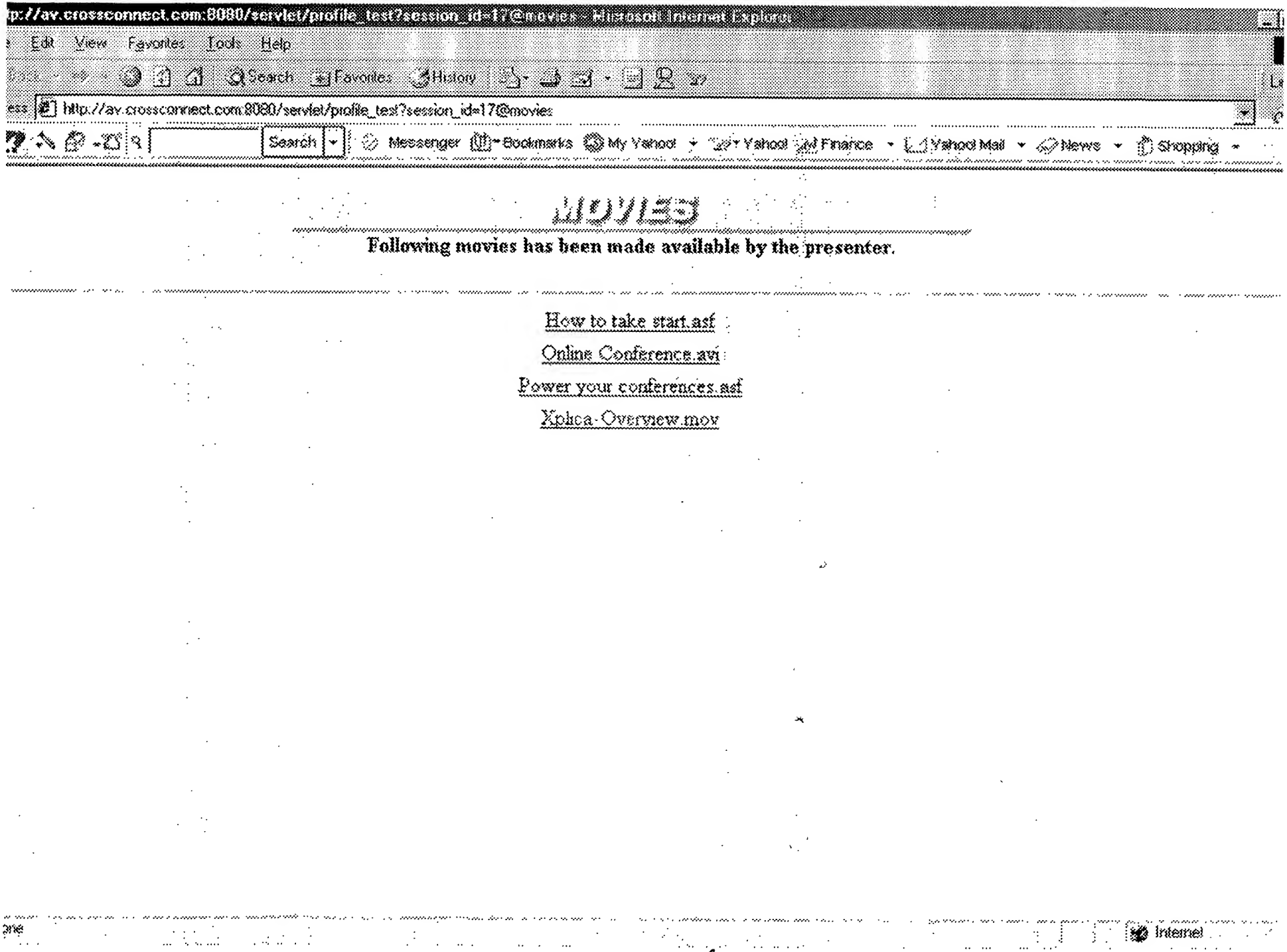
tp://av.crossconnect.com:8080/servlet/profile_test?session_id=17@movies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Search Favorites History
ess http://av.crossconnect.com:8080/servlet/profile_test?session_id=17@movies
Search Messenger Bookmarks My Yahoo! Yahoo! Finance Yahoo! Mail News Shopping
Movies
Following movies has been made available by the presenter.
How to take start.asf
Online Conference.avi
Power your conferences.asf
Xplica-Overview.mov
Internet

Figure 6

700

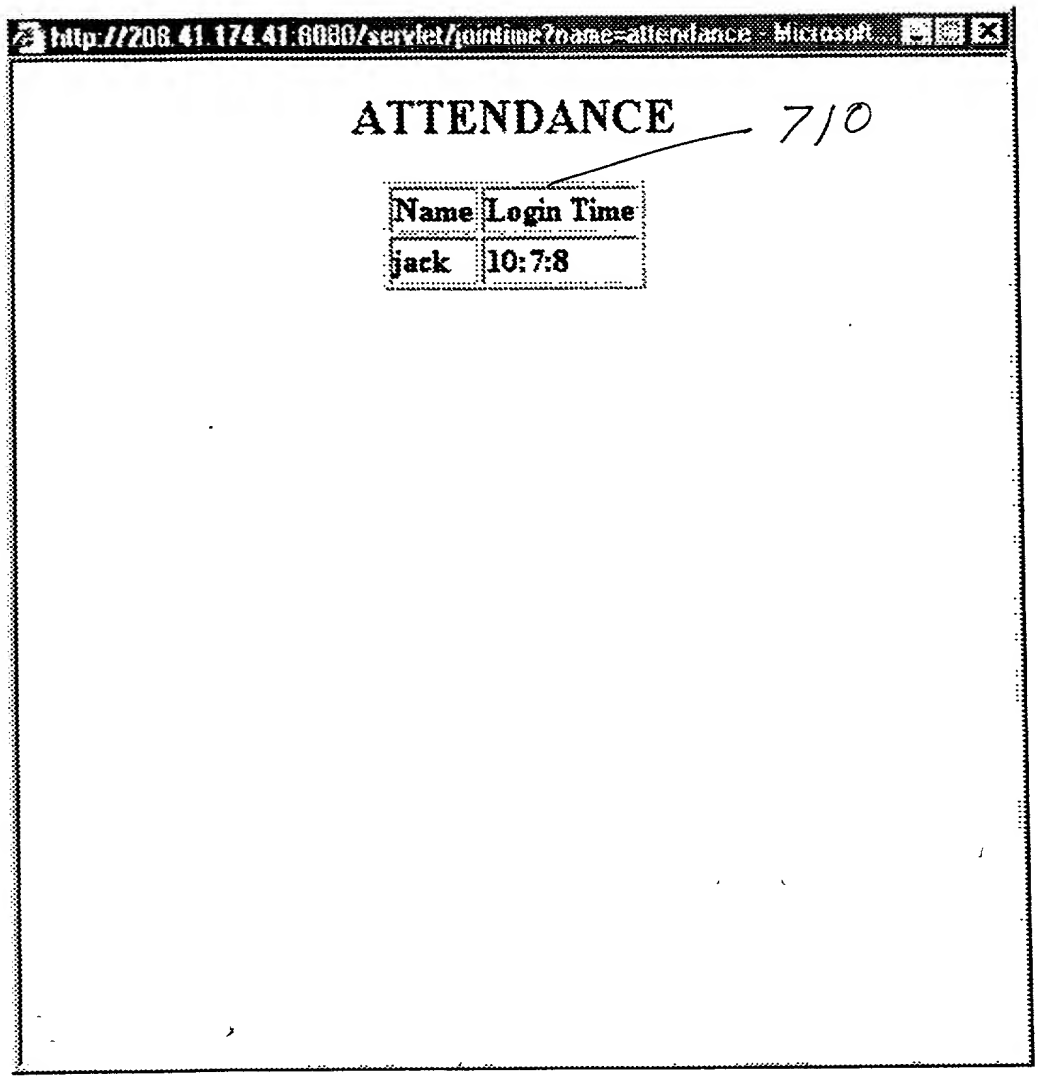
http://208.41.174.41:6080/servlet/jointime?name=attendance - Microsoft
ATTENDANCE
710
Name
Login Time
jack
10:7:8

Fig. 7

Homepage

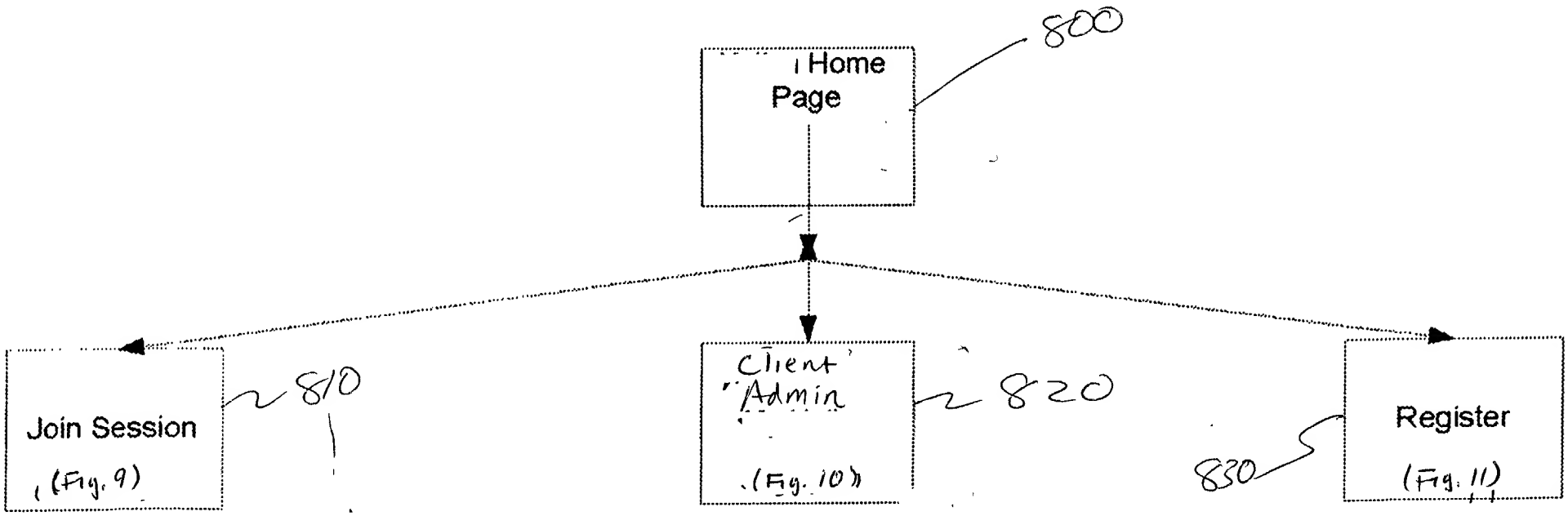

Fig. 8

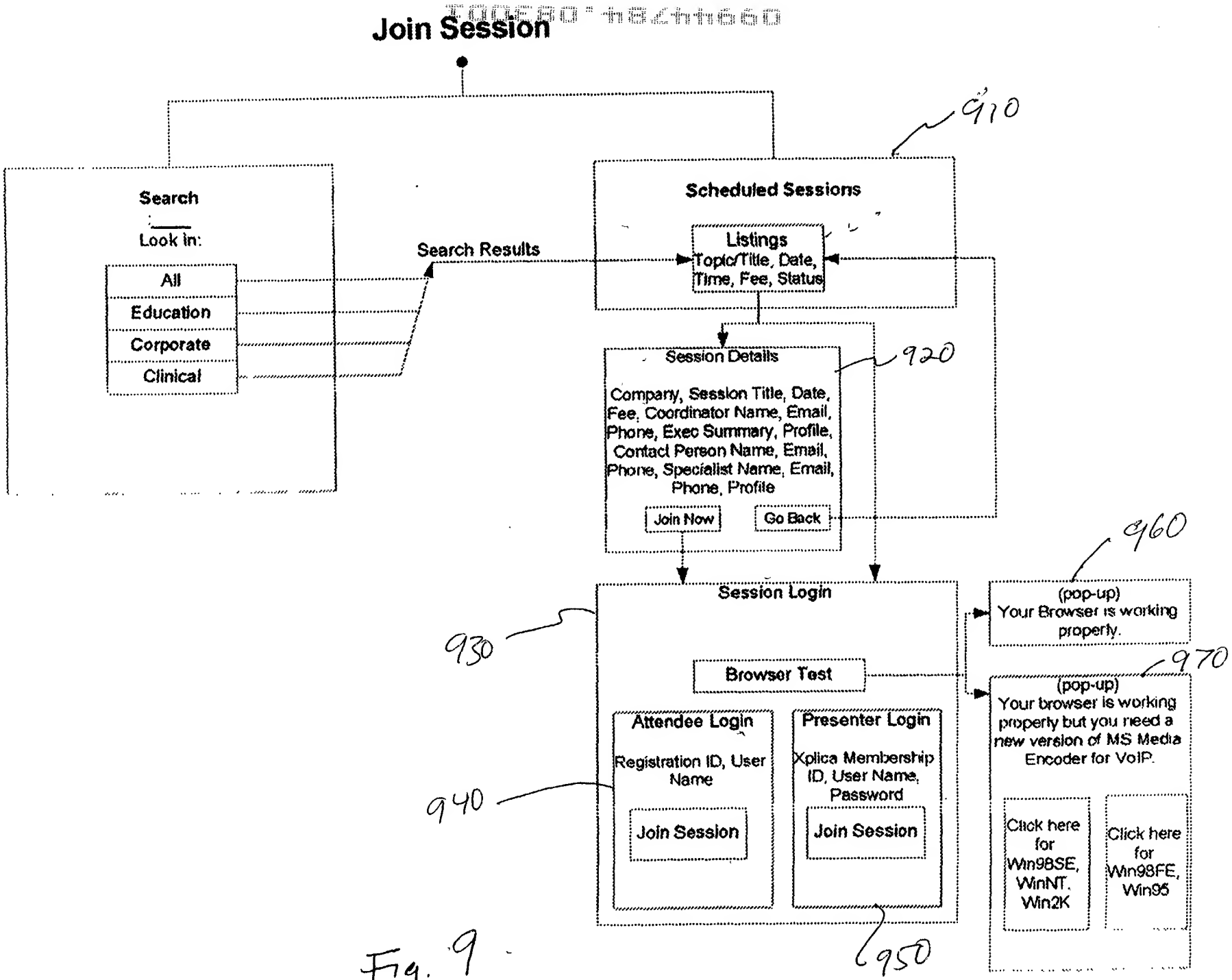
Join Session
910
Search
Look in:
All
Education
Corporate
Clinical
Search Results
Scheduled Sessions
Listings
Topic/Title, Date, Time, Fee, Status
Session Details
920
Company, Session Title, Date, Fee, Coordinator Name, Email, Phone, Exec Summary, Profile, Contact Person Name, Email, Phone, Specialist Name, Email, Phone, Profile
Join Now
Go Back
960
(pop-up)
Your Browser is working properly.
Session Login
930
Browser Test
970
(pop-up)
Your browser is working properly but you need a new version of MS Media Encoder for VoIP.
Attendee Login
Registration ID, User Name
940
Join Session
Presenter Login
Xplica Membership ID, User Name, Password
Join Session
950
Click here for Win98SE, WinNT, Win2K
Click here for Win98FE, Win95

Fig. 9

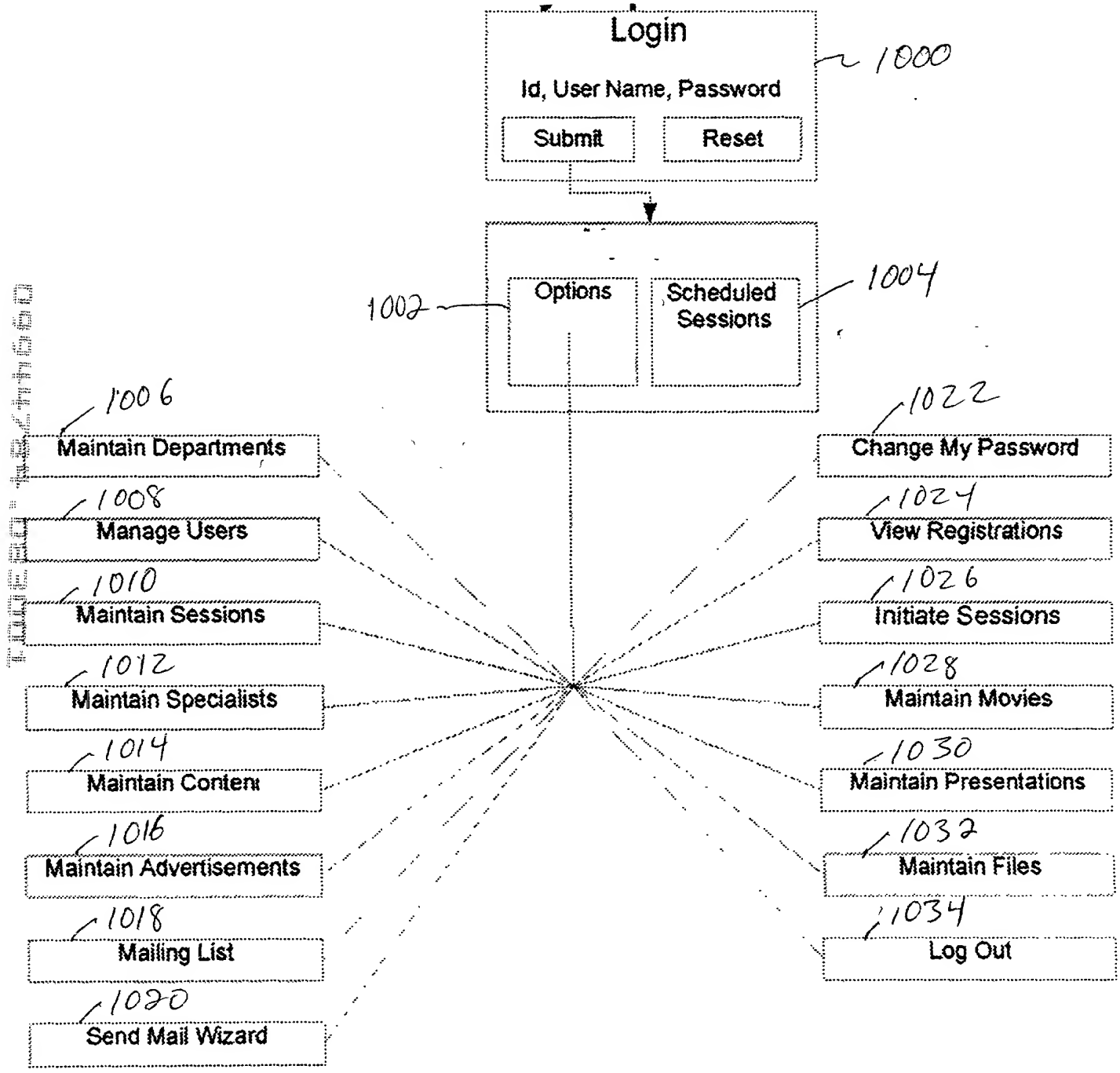
Login
Id, User Name, Password
Submit
Reset
1000
Options
Scheduled Sessions
1002
1004
1006
Maintain Departments
1008
Manage Users
1010
Maintain Sessions
1012
Maintain Specialists
1014
Maintain Content
1016
Maintain Advertisements
1018
Mailing List
1020
Send Mail Wizard
1022
Change My Password
1024
View Registrations
1026
Initiate Sessions
1028
Maintain Movies
1030
Maintain Presentations
1032
Maintain Files
1034
Log Out

Fig. 10a

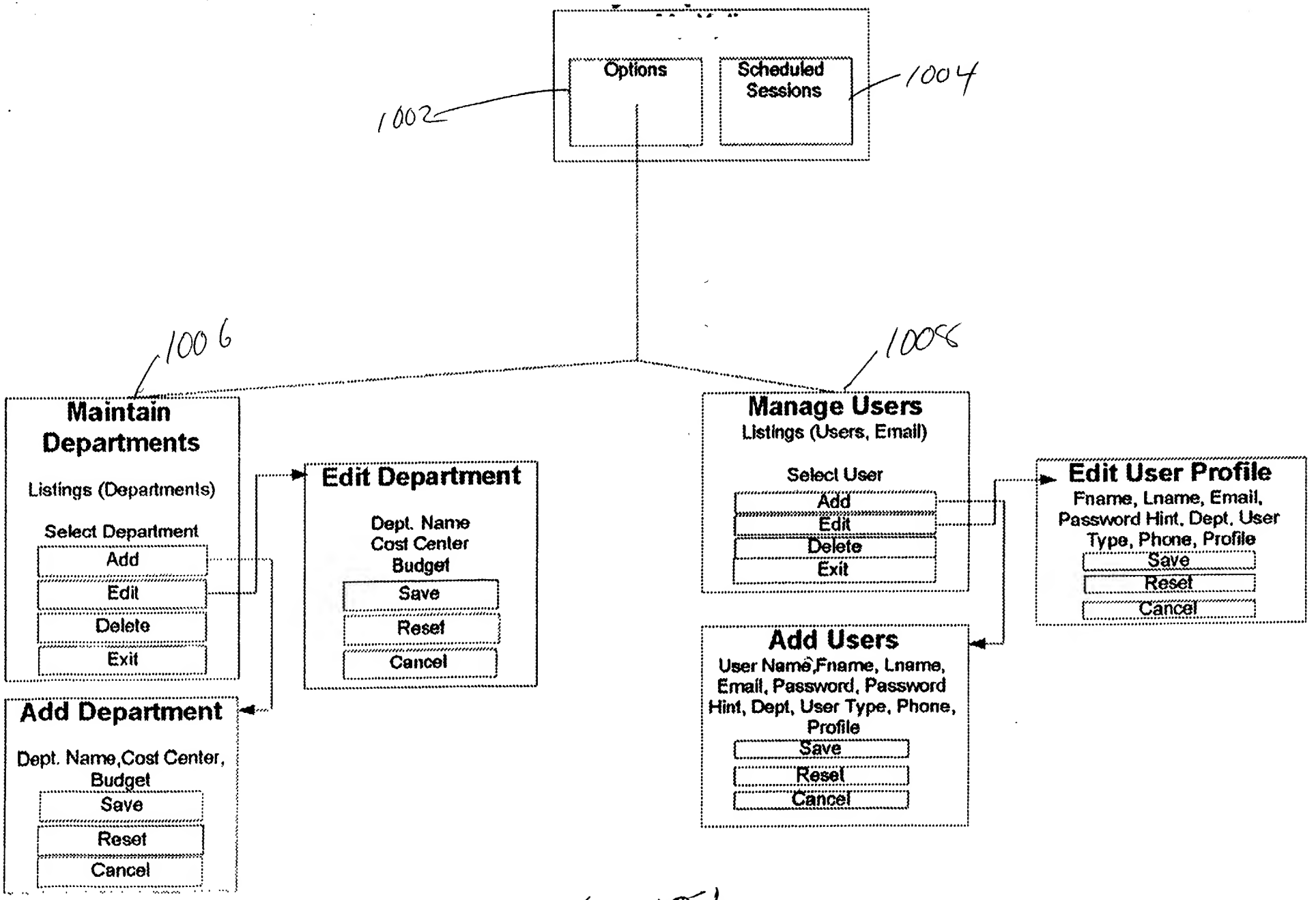
Options
Scheduled Sessions
1002
1004
1006
1008
Maintain Departments
Listings (Departments)
Select Department
Add
Edit
Delete
Exit
Edit Department
Dept. Name
Cost Center
Budget
Save
Reset
Cancel
Add Department
Dept. Name,Cost Center, Budget
Save
Reset
Cancel
Manage Users
Listings (Users, Email)
Select User
Add
Edit
Delete
Exit
Edit User Profile
Fname, Lname, Email, Password Hint, Dept, User Type, Phone, Profile
Save
Reset
Cancel
Add Users
User Name,Fname, Lname, Email, Password, Password Hint, Dept, User Type, Phone, Profile
Save
Reset
Cancel

Fig. 10b

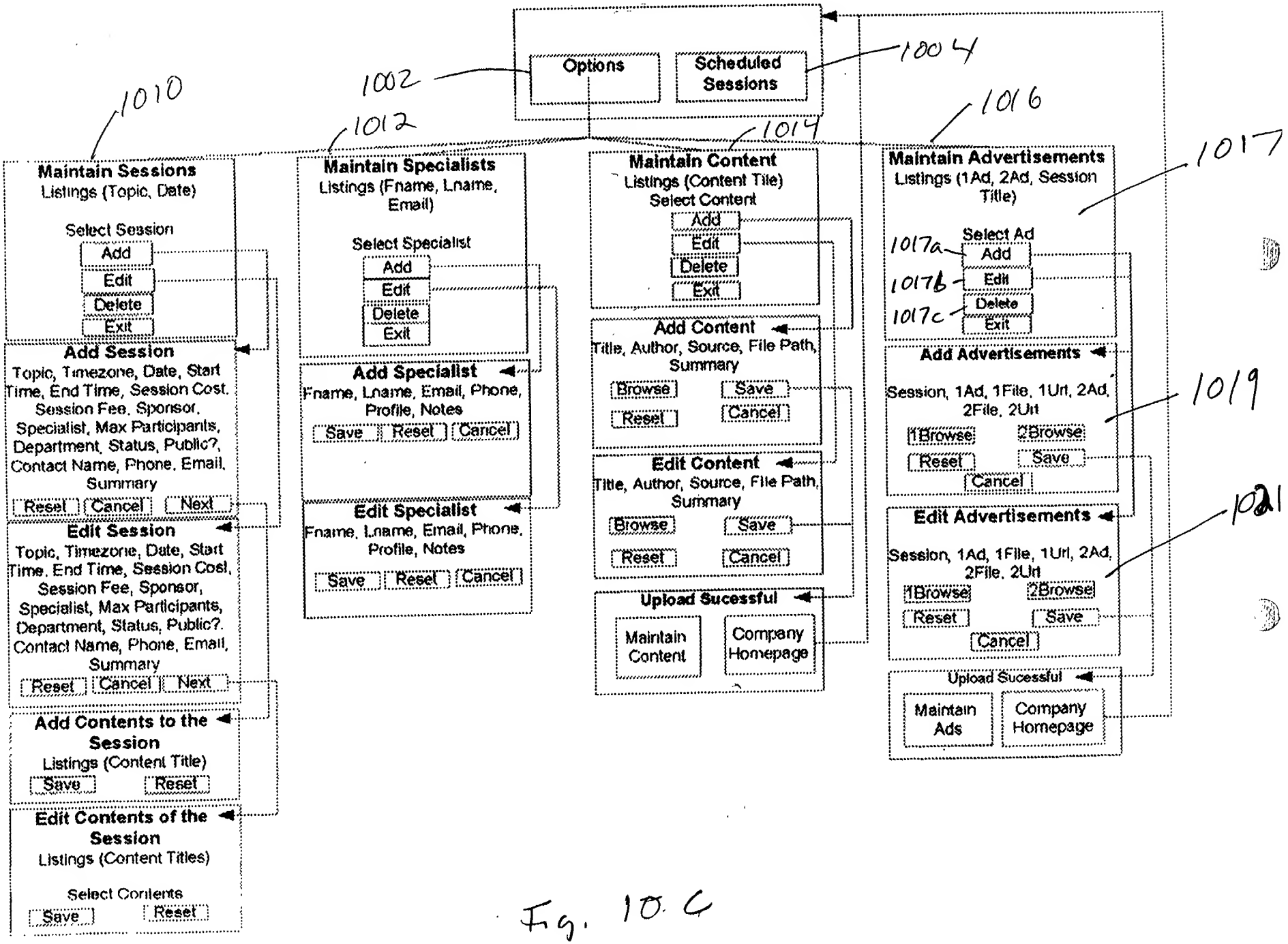
1004
Options
Scheduled Sessions
1002
1010
1012
1014
1016
1017
Maintain Sessions
Listings (Topic, Date)
Select Session
Add
Edit
Delete
Exit
Add Session
Topic, Timezone, Date, Start Time, End Time, Session Cost, Session Fee, Sponsor, Specialist, Max Participants, Department, Status, Public?, Contact Name, Phone, Email, Summary
Reset
Cancel
Next
Edit Session
Topic, Timezone, Date, Start Time, End Time, Session Cost, Session Fee, Sponsor, Specialist, Max Participants, Department, Status, Public?, Contact Name, Phone, Email, Summary
Reset
Cancel
Next
Add Contents to the Session
Listings (Content Title)
Save
Reset
Edit Contents of the Session
Listings (Content Titles)
Select Contents
Save
Reset
Maintain Specialists
Listings (Fname, Lname, Email)
Select Specialist
Add
Edit
Delete
Exit
Add Specialist
Fname, Lname, Email, Phone, Profile, Notes
Save
Reset
Cancel
Edit Specialist
Fname, Lname, Email, Phone, Profile, Notes
Save
Reset
Cancel
Maintain Content
Listings (Content Title)
Select Content
Add
Edit
Delete
Exit
Add Content
Title, Author, Source, File Path, Summary
Browse
Save
Reset
Cancel
Edit Content
Title, Author, Source, File Path, Summary
Browse
Save
Reset
Cancel
Upload Sucessful
Maintain Content
Company Homepage
Maintain Advertisements
Listings (1Ad, 2Ad, Session Title)
Select Ad
1017a
Add
1017b
Edit
1017c
Delete
Exit
Add Advertisements
Session, 1Ad, 1File, 1Url, 2Ad, 2File, 2Url
1Browse
2Browse
Reset
Save
Cancel
1019
Edit Advertisements
Session, 1Ad, 1File, 1Url, 2Ad, 2File, 2Url
1Browse
2Browse
Reset
Save
Cancel
1021
Upload Sucessful
Maintain Ads
Company Homepage

Fig. 10C

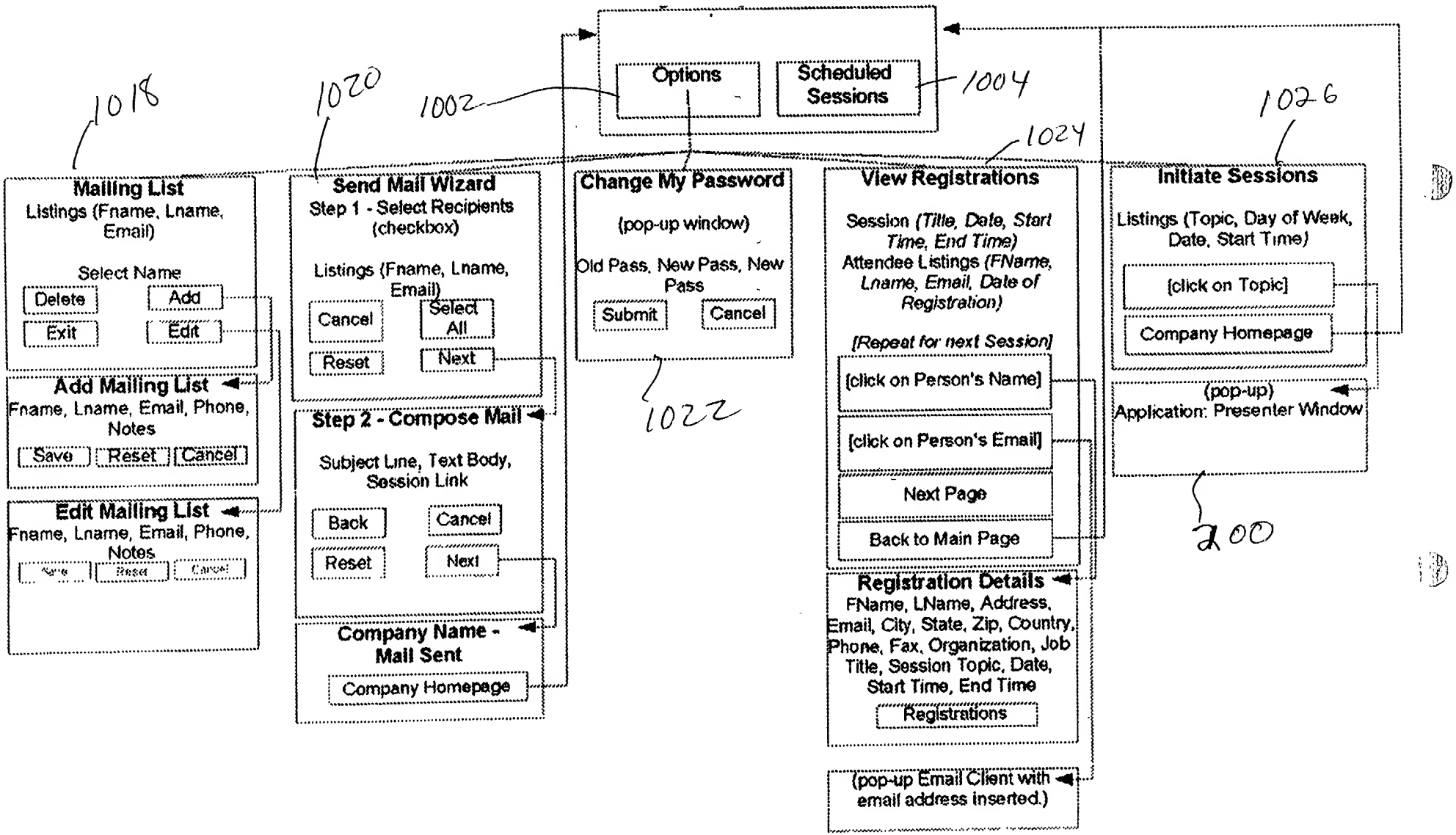
1018
1020
1002
1004
1024
1026
Options
Scheduled Sessions
Mailing List
Listings (Fname, Lname, Email)
Select Name
Delete
Add
Exit
Edit
Add Mailing List
Fname, Lname, Email, Phone, Notes
Save
Reset
Cancel
Edit Mailing List
Fname, Lname, Email, Phone, Notes
Send Mail Wizard
Step 1 - Select Recipients (checkbox)
Listings (Fname, Lname, Email)
Cancel
Select All
Reset
Next
Step 2 - Compose Mail
Subject Line, Text Body, Session Link
Back
Cancel
Reset
Next
Company Name - Mail Sent
Company Homepage
Change My Password
(pop-up window)
Old Pass, New Pass, New Pass
Submit
Cancel
1022
View Registrations
Session (Title, Date, Start Time, End Time)
Attendee Listings (FName, Lname, Email, Date of Registration)
[Repeat for next Session]
[click on Person's Name]
[click on Person's Email]
Next Page
Back to Main Page
Registration Details
FName, LName, Address, Email, City, State, Zip, Country, Phone, Fax, Organization, Job Title, Session Topic, Date, Start Time, End Time
Registrations
(pop-up Email Client with email address inserted.)
Initiate Sessions
Listings (Topic, Day of Week, Date, Start Time)
[click on Topic]
Company Homepage
(pop-up)
Application: Presenter Window
200

Fig. 10d

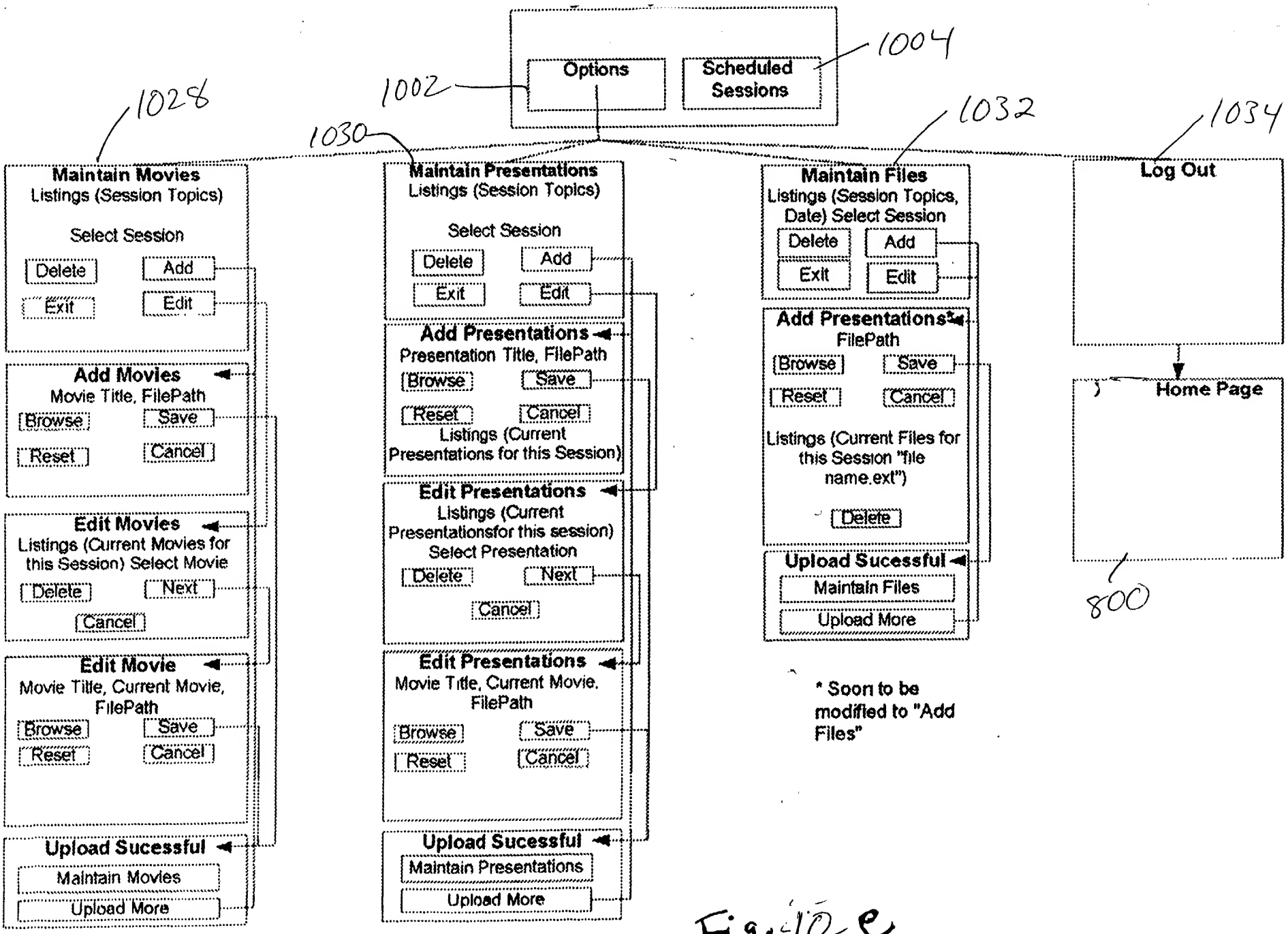
Options
Scheduled Sessions
1002
1004
1028
1030
1032
1034
Maintain Movies
Listings (Session Topics)
Select Session
Delete
Add
Exit
Edit
Add Movies
Movie Title, FilePath
Browse
Save
Reset
Cancel
Edit Movies
Listings (Current Movies for this Session) Select Movie
Delete
Next
Cancel
Edit Movie
Movie Title, Current Movie, FilePath
Browse
Save
Reset
Cancel
Upload Sucessful
Maintain Movies
Upload More
Maintain Presentations
Listings (Session Topics)
Select Session
Delete
Add
Exit
Edit
Add Presentations
Presentation Title, FilePath
Browse
Save
Reset
Cancel
Listings (Current Presentations for this Session)
Edit Presentations
Listings (Current Presentationsfor this session)
Select Presentation
Delete
Next
Cancel
Edit Presentations
Movie Title, Current Movie, FilePath
Browse
Save
Reset
Cancel
Upload Sucessful
Maintain Presentations
Upload More
Maintain Files
Listings (Session Topics, Date) Select Session
Delete
Add
Exit
Edit
Add Presentations*
FilePath
Browse
Save
Reset
Cancel
Listings (Current Files for this Session "file name.ext")
Delete
Upload Sucessful
Maintain Files
Upload More
* Soon to be modified to "Add Files"
Log Out
Home Page
800

Fig. 10e

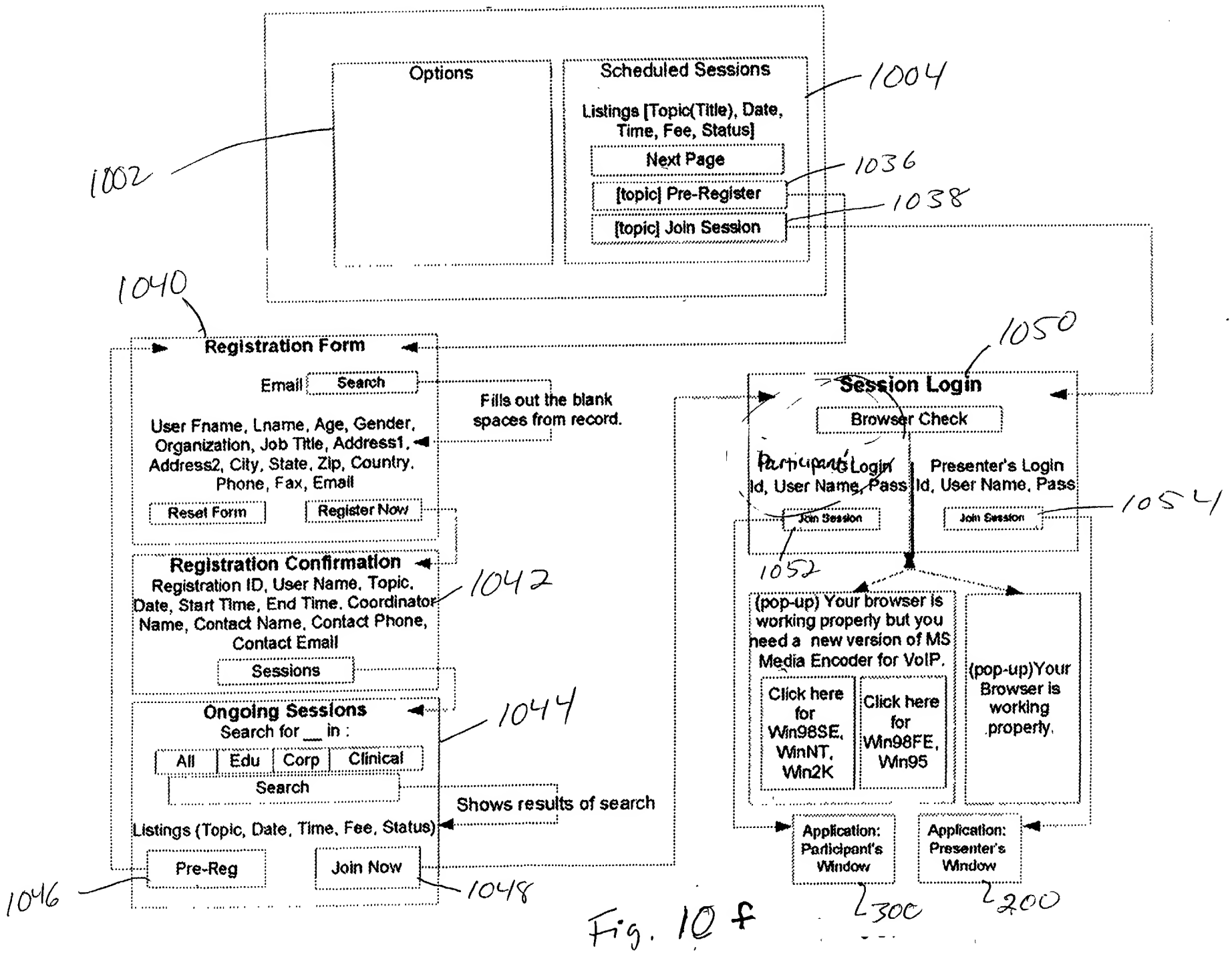
Options
Scheduled Sessions
Listings [Topic(Title), Date, Time, Fee, Status]
Next Page
[topic] Pre-Register
[topic] Join Session
1002
1004
1036
1038
1040
Registration Form
Email
Search
Fills out the blank spaces from record.
User Fname, Lname, Age, Gender, Organization, Job Title, Address1, Address2, City, State, Zip, Country, Phone, Fax, Email
Reset Form
Register Now
Registration Confirmation
Registration ID, User Name, Topic, Date, Start Time, End Time, Coordinator Name, Contact Name, Contact Phone, Contact Email
1042
Sessions
Ongoing Sessions
Search for __ in :
All
Edu
Corp
Clinical
Search
1044
Shows results of search
Listings (Topic, Date, Time, Fee, Status)
Pre-Reg
Join Now
1046
1048
1050
Session Login
Browser Check
Participant's Login
Id, User Name, Pass
Presenter's Login
Id, User Name, Pass
Join Session
Join Session
1054
1052
(pop-up) Your browser is working properly but you need a new version of MS Media Encoder for VoIP.
Click here for Win98SE, WinNT, Win2K
Click here for Win98FE, Win95
(pop-up)Your Browser is working properly.
Application: Participant's Window
Application: Presenter's Window
1300
1200

Fig. 10f

10028047 082704

Register

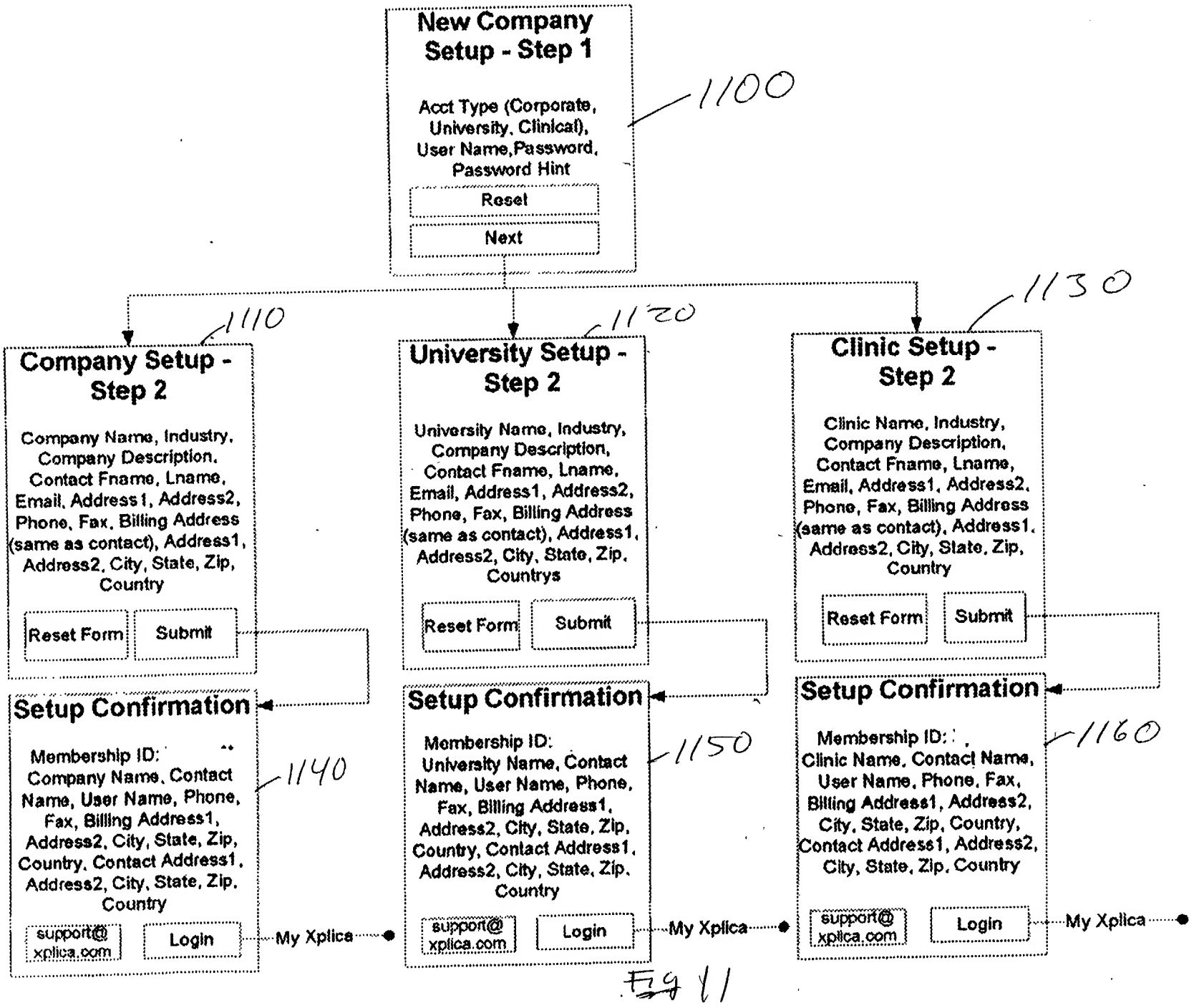

Fig 11

TOOS30 "TBZ"TTOSD

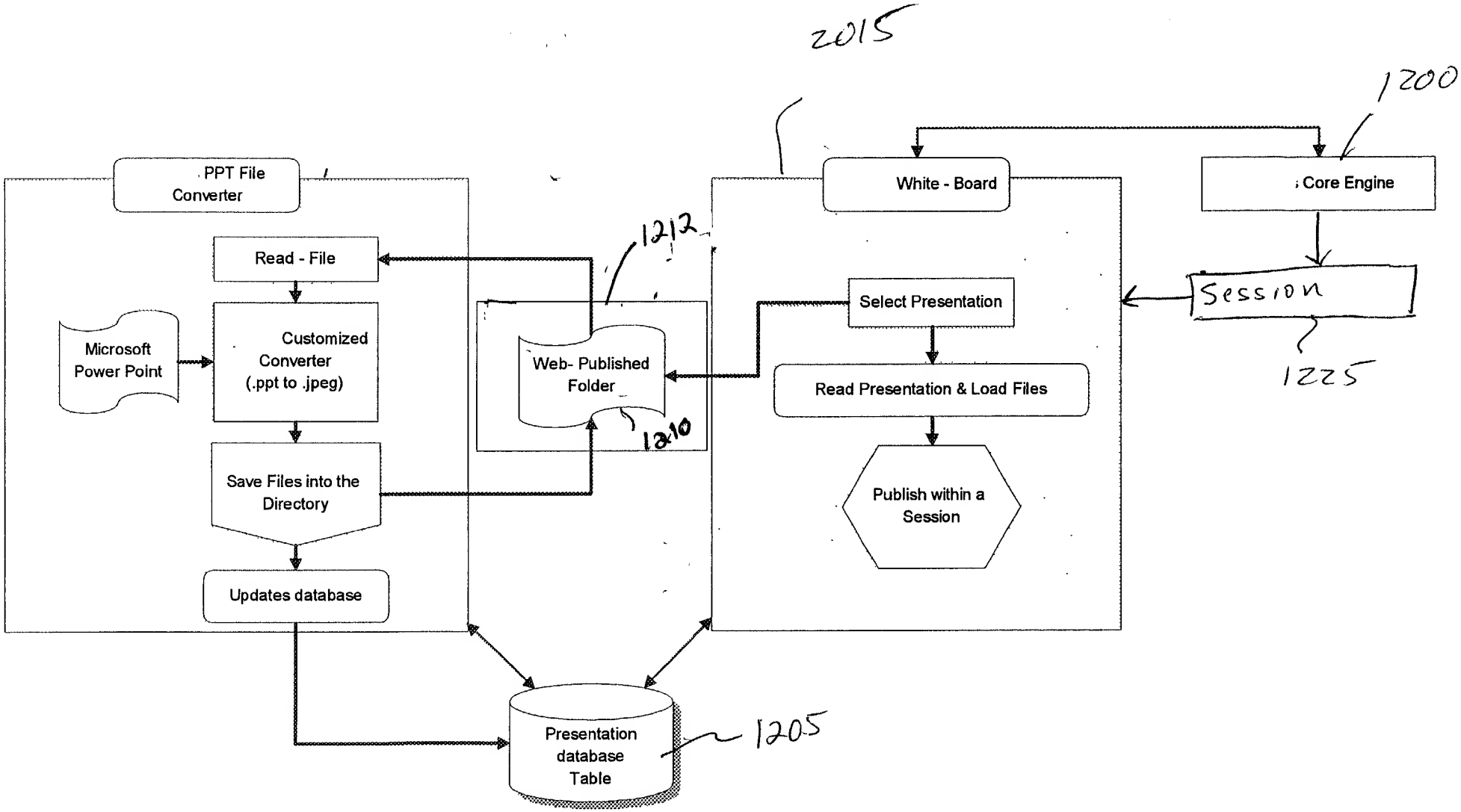

Figure 12

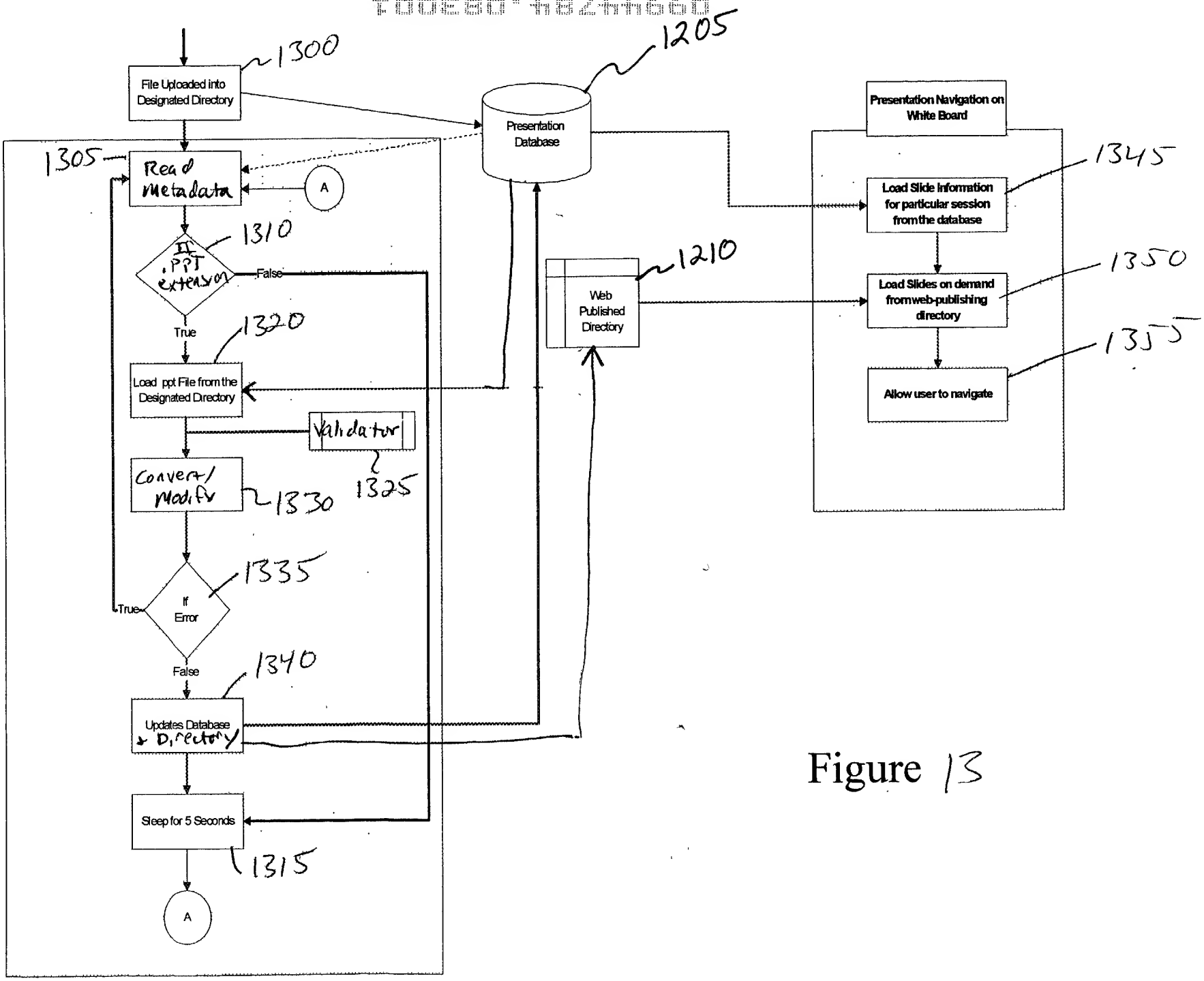
1300
File Uploaded into Designated Directory
1205
Presentation Database
Presentation Navigation on White Board
1305
Read Metadata
A
1345
Load Slide Information for particular session from the database
1310
If .PPT extension
False
1210
Web Published Directory
1350
Load Slides on demand from web-publishing directory
True
1320
1355
Load ppt File from the Designated Directory
Allow user to navigate
Validator
1325
Convert/ Modify
1330
1335
If Error
True
False
1340
Updates Database & Directory
Sleep for 5 Seconds
1315
A

Figure 13

TOC30 th2mm60

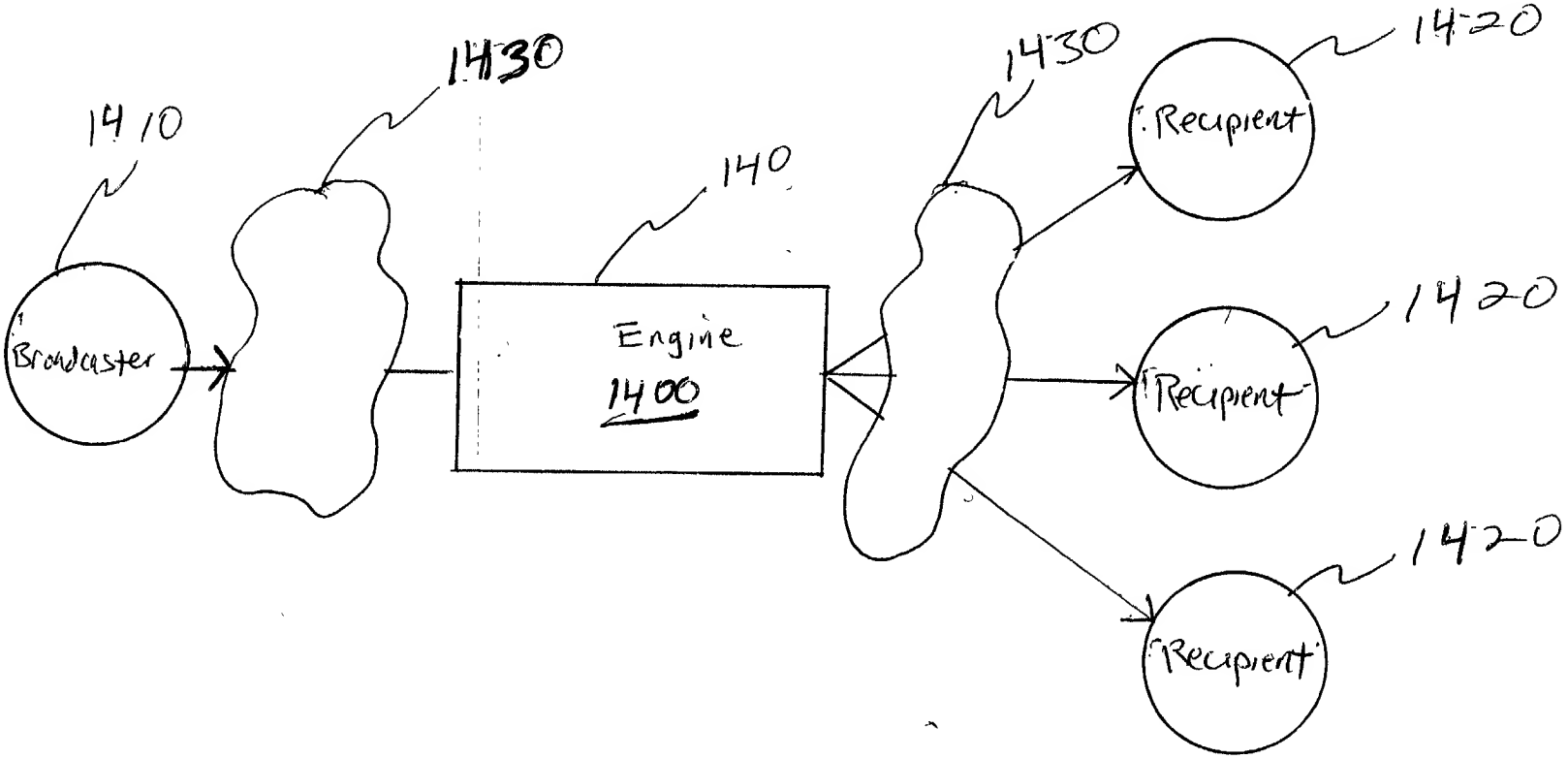

Figure 14

T00680 "1827"1680

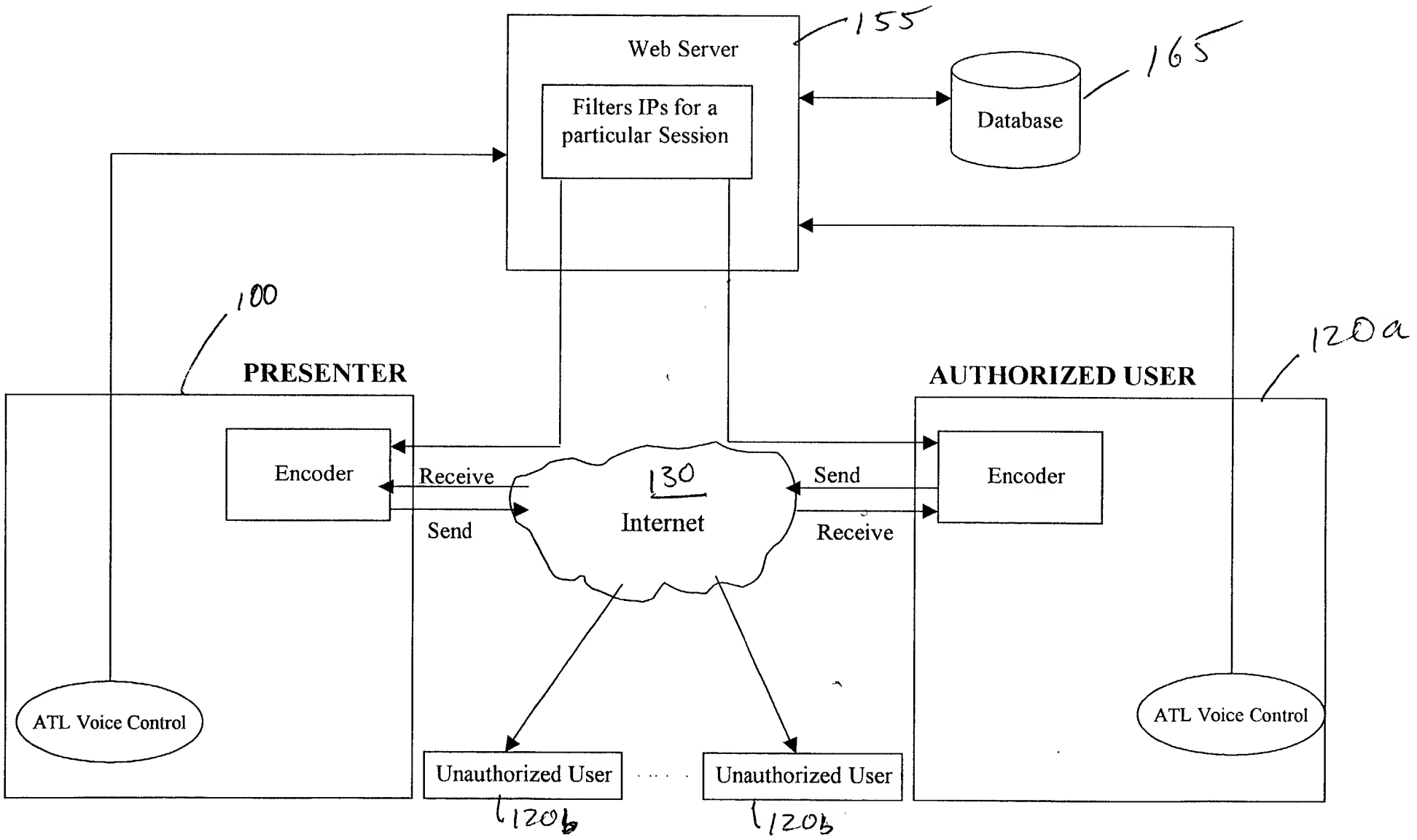

Figure 15

Docket No. 28268-0001

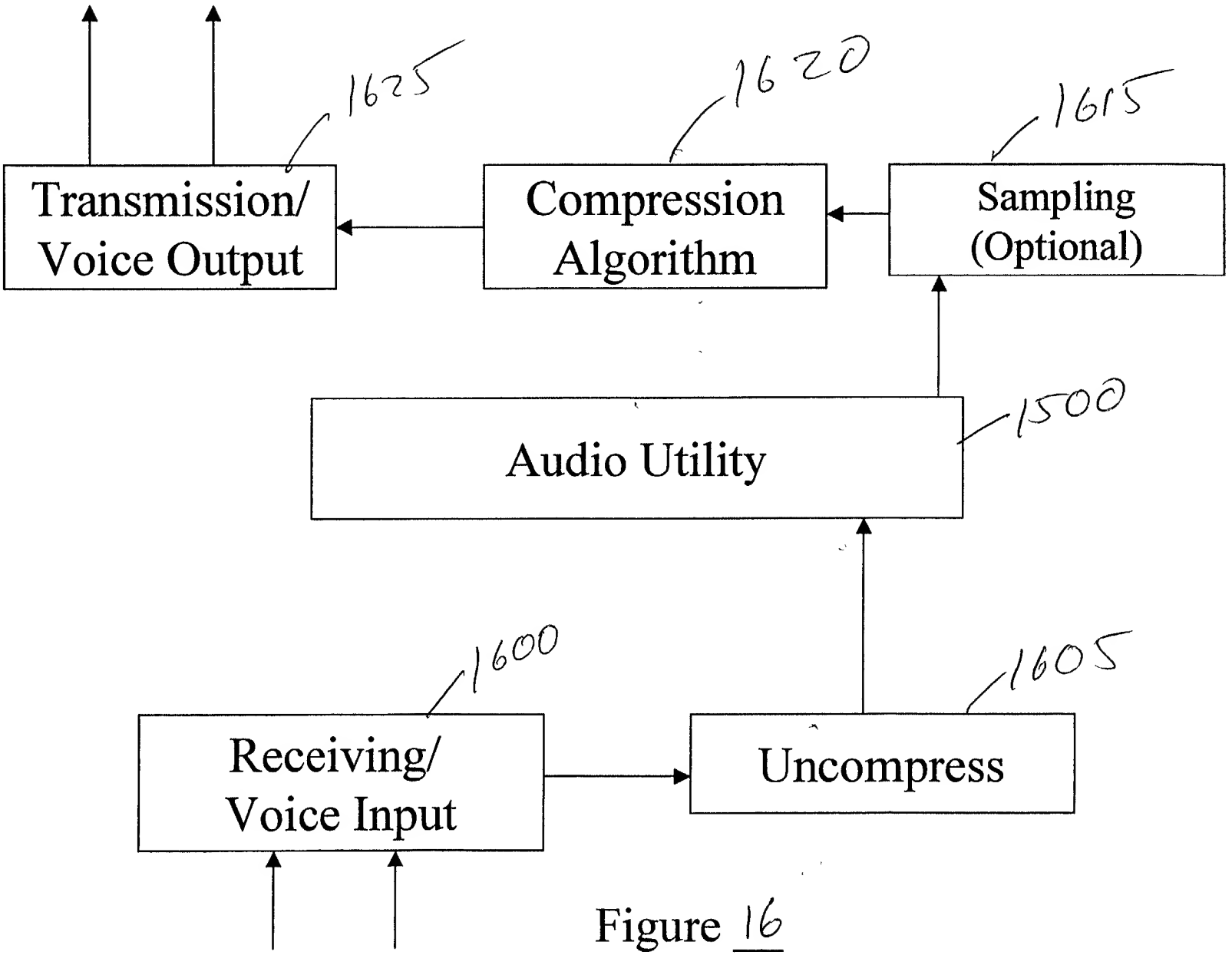

Figure 16

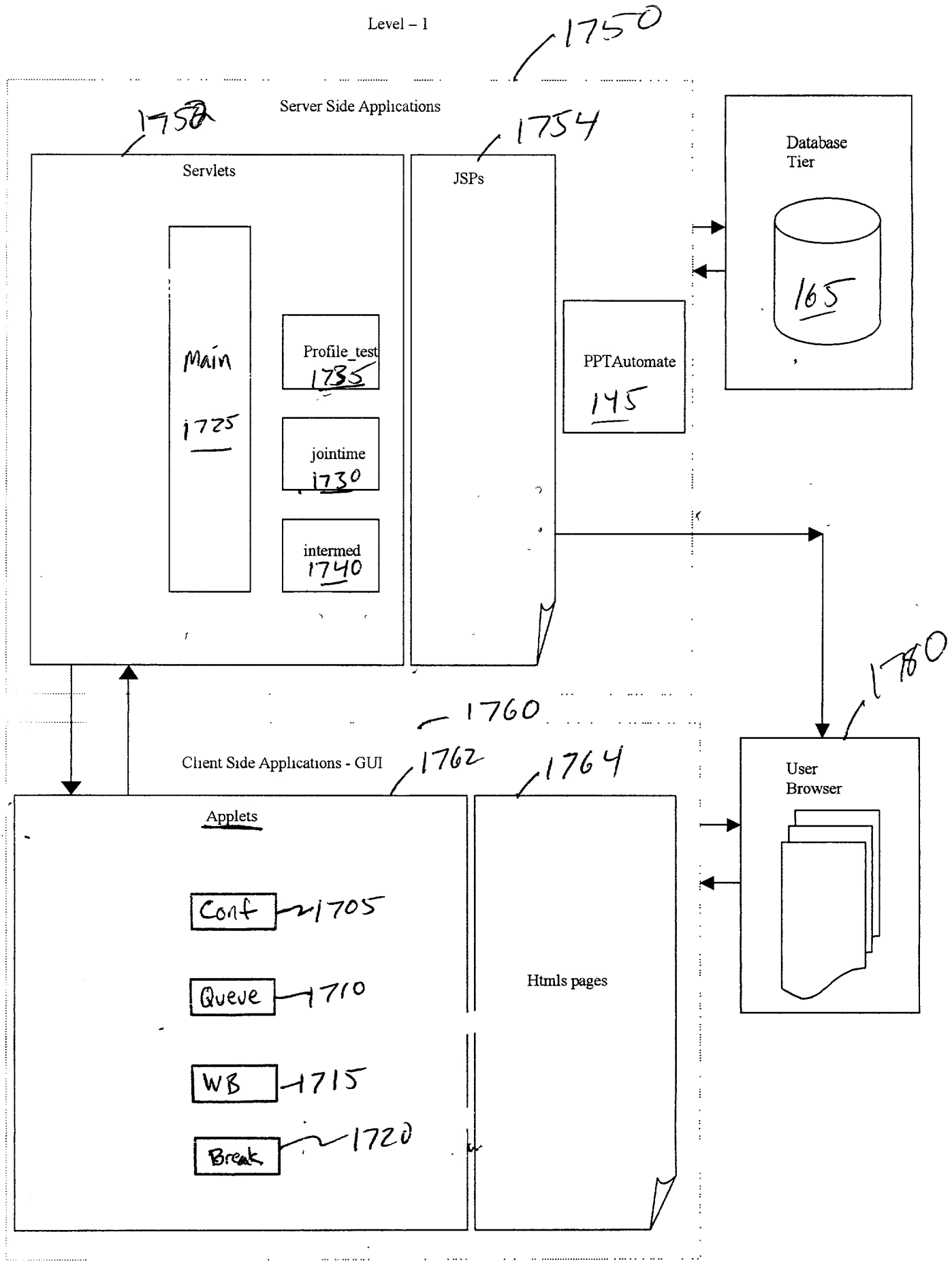
Level – 1
1750
Server Side Applications
1752
Servlets
Main
1725
Profile_test
1735
jointime
1730
intermed
1740
1754
JSPs
PPTAutomate
145
Database
Tier
165
1760
Client Side Applications - GUI
1762
Applets
Conf
1705
Queue
1710
WB
1715
Break
1720
1764
Htmls pages
1780
User
Browser

Figure 17a

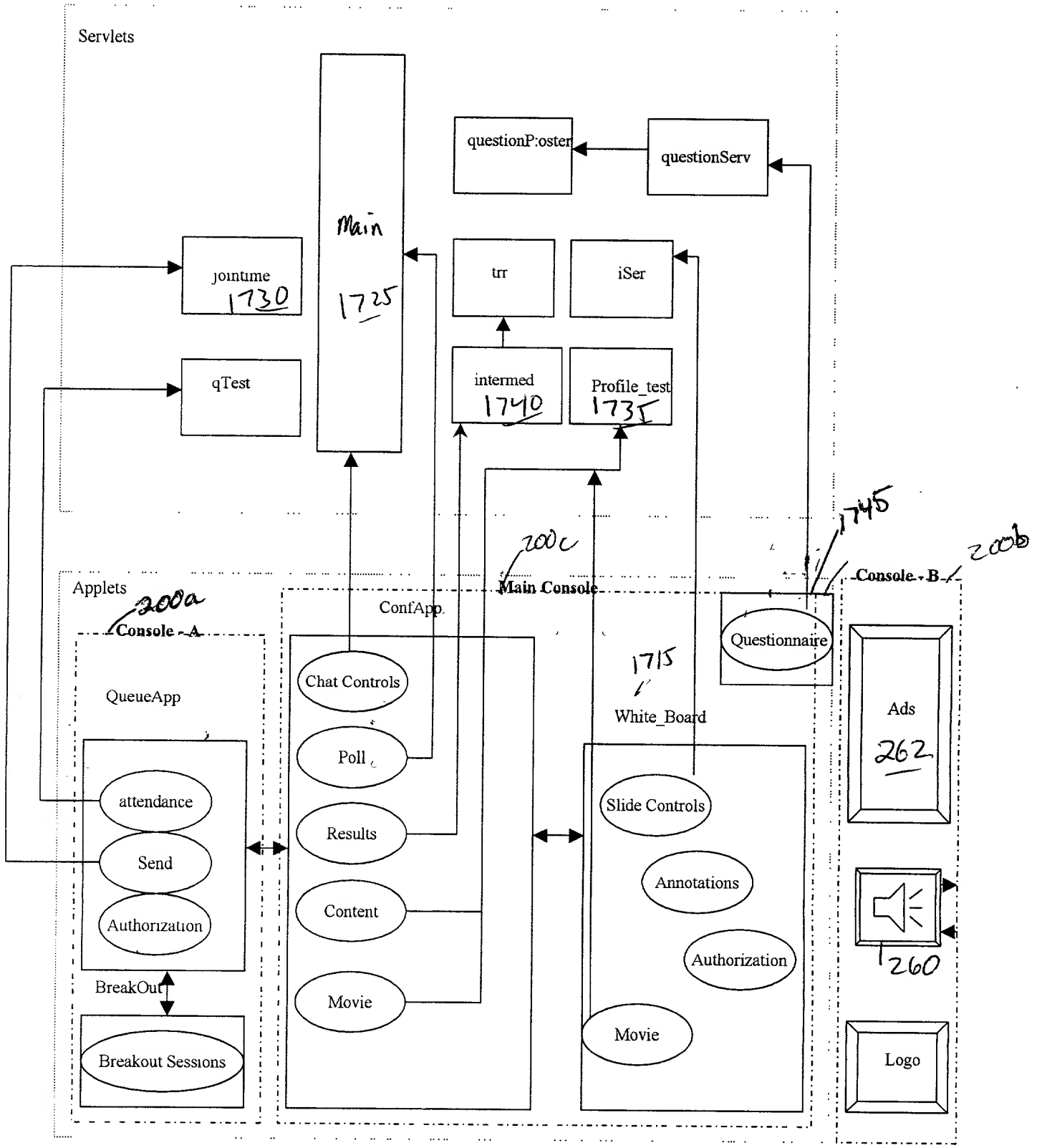
Servlets
Main
1725
questionP:oster
questionServ
jointime
1730
trr
iSer
qTest
intermed
1740
Profile_test
1735
1745
200c
200b
Applets
200a
Console - A
Main Console
ConfApp
Console - B
Questionnaire
Chat Controls
1715
White_Board
QueueApp
Poll
Ads
262
attendance
Results
Slide Controls
Send
Annotations
Content
Authorization
260
BreakOut
Movie
Movie
Breakout Sessions
Logo

Figure 17b

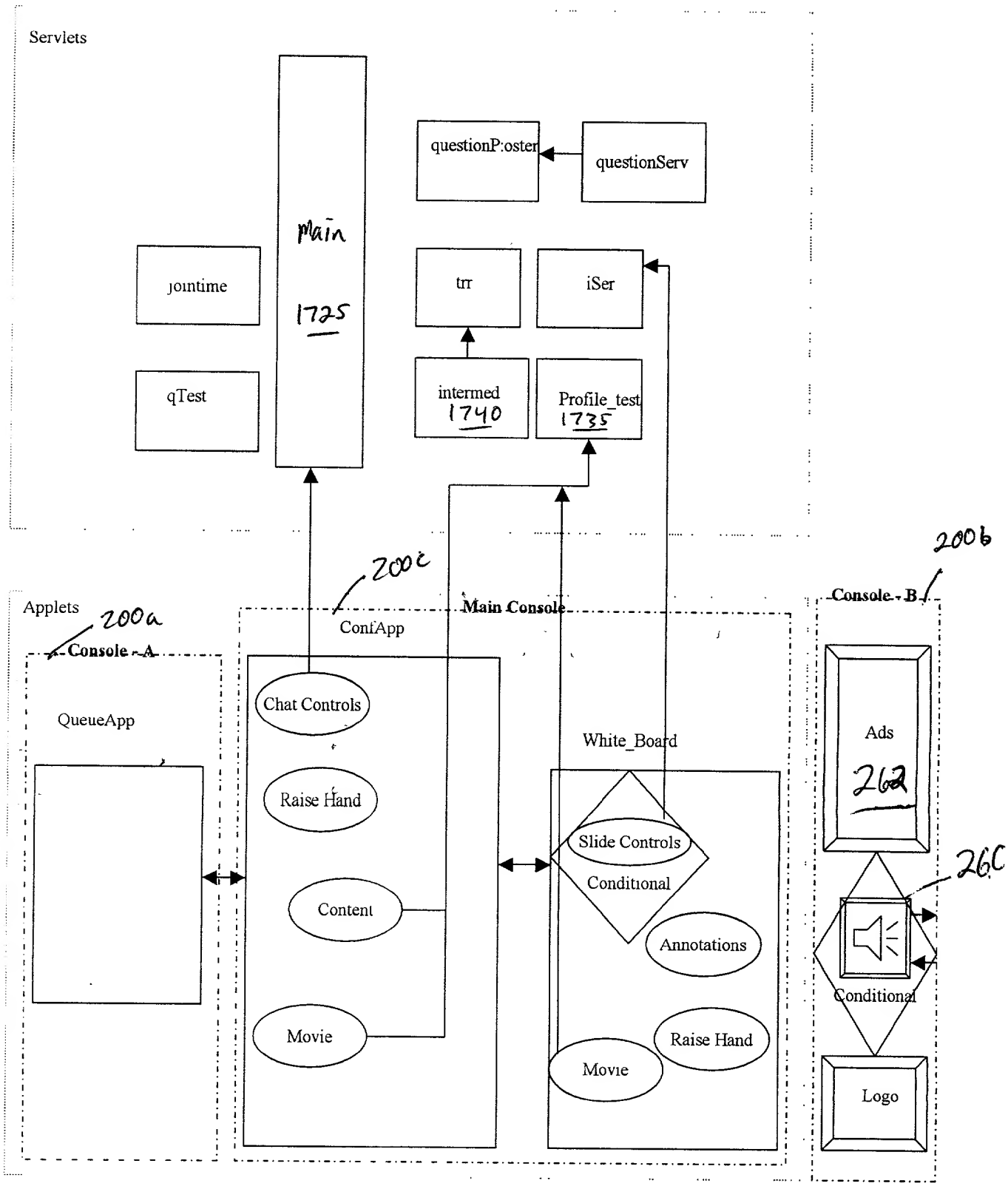
Servlets
Main
1725
questionP:oster
questionServ
jointime
qTest
trr
iSer
intermed
1740
Profile_test
1735
200b
200c
Applets
200a
Console - A
ConfApp
Main Console
Console - B
QueueApp
Chat Controls
Raise Hand
Content
Movie
White_Board
Slide Controls
Conditional
Annotations
Raise Hand
Movie
Ads
262
26C
Conditional
Logo

Figure 17c

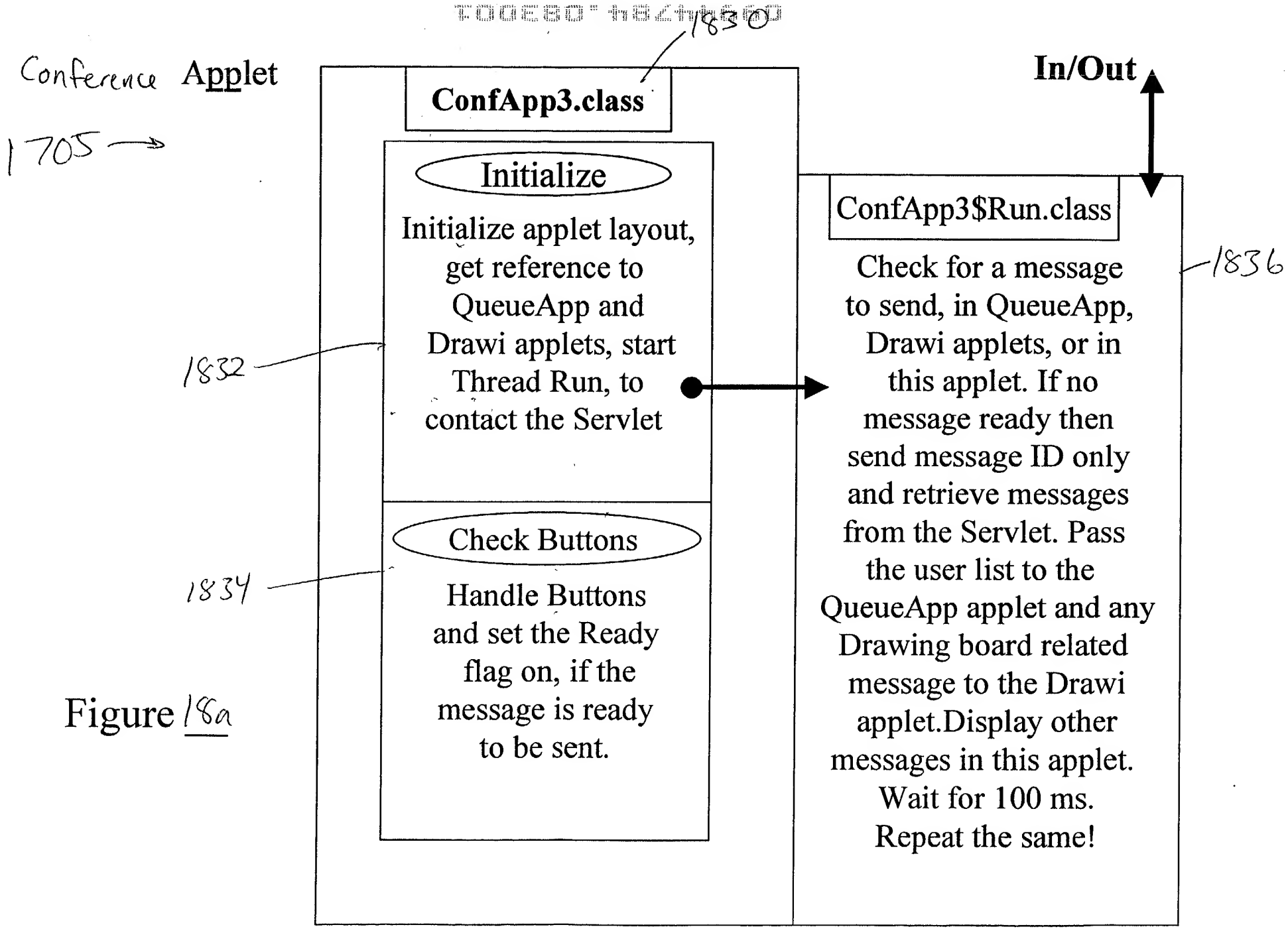
Conference Applet
1705
ConfApp3.class
1830
In/Out
Initialize
Initialize applet layout, get reference to QueueApp and Drawi applets, start Thread Run, to contact the Servlet
1832
Check Buttons
Handle Buttons and set the Ready flag on, if the message is ready to be sent.
1834
ConfApp3$Run.class
Check for a message to send, in QueueApp, Drawi applets, or in this applet. If no message ready then send message ID only and retrieve messages from the Servlet. Pass the user list to the QueueApp applet and any Drawing board related message to the Drawi applet.Display other messages in this applet. Wait for 100 ms. Repeat the same!
1836

Figure 18a

Queue Applet

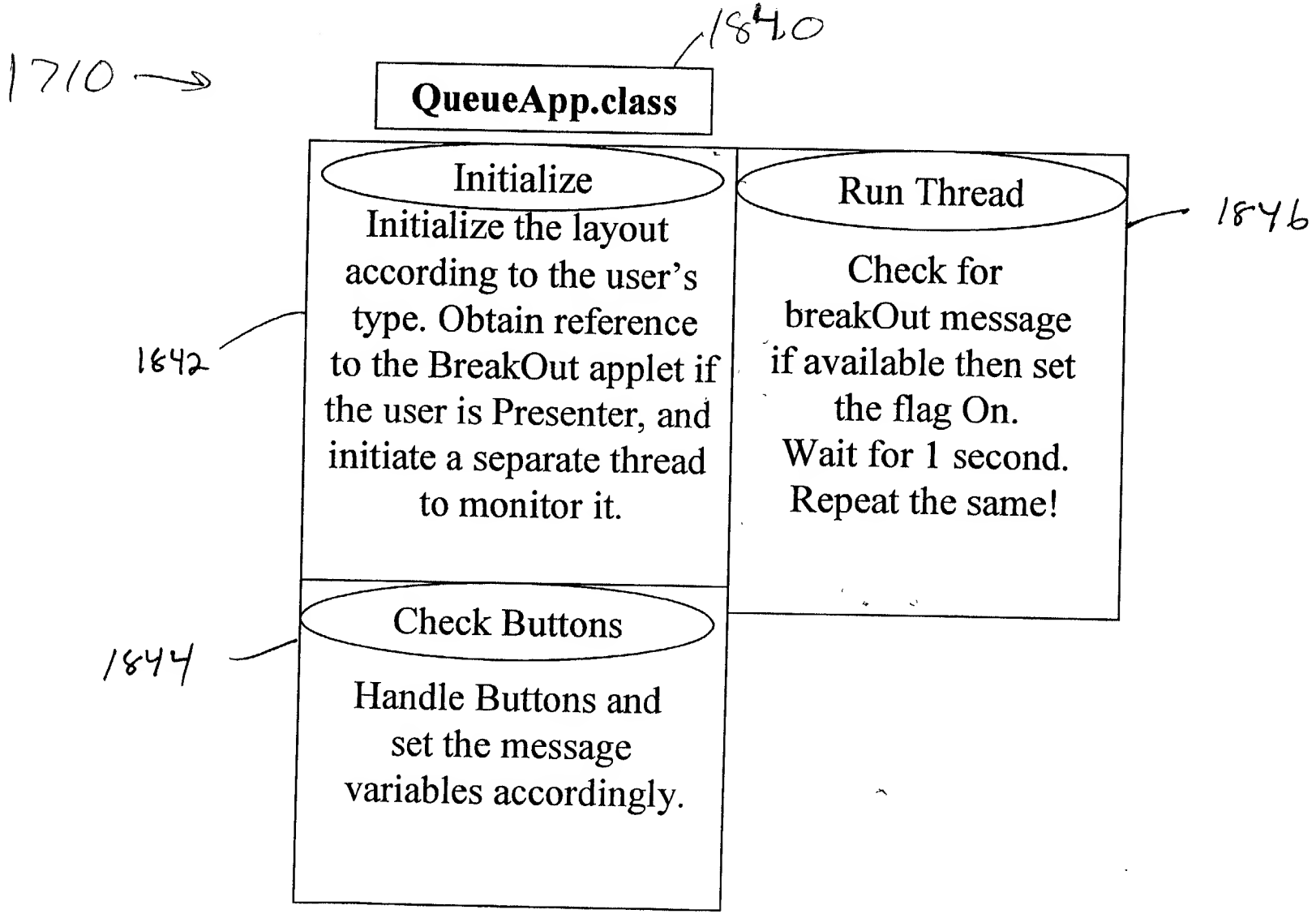

Figure 185

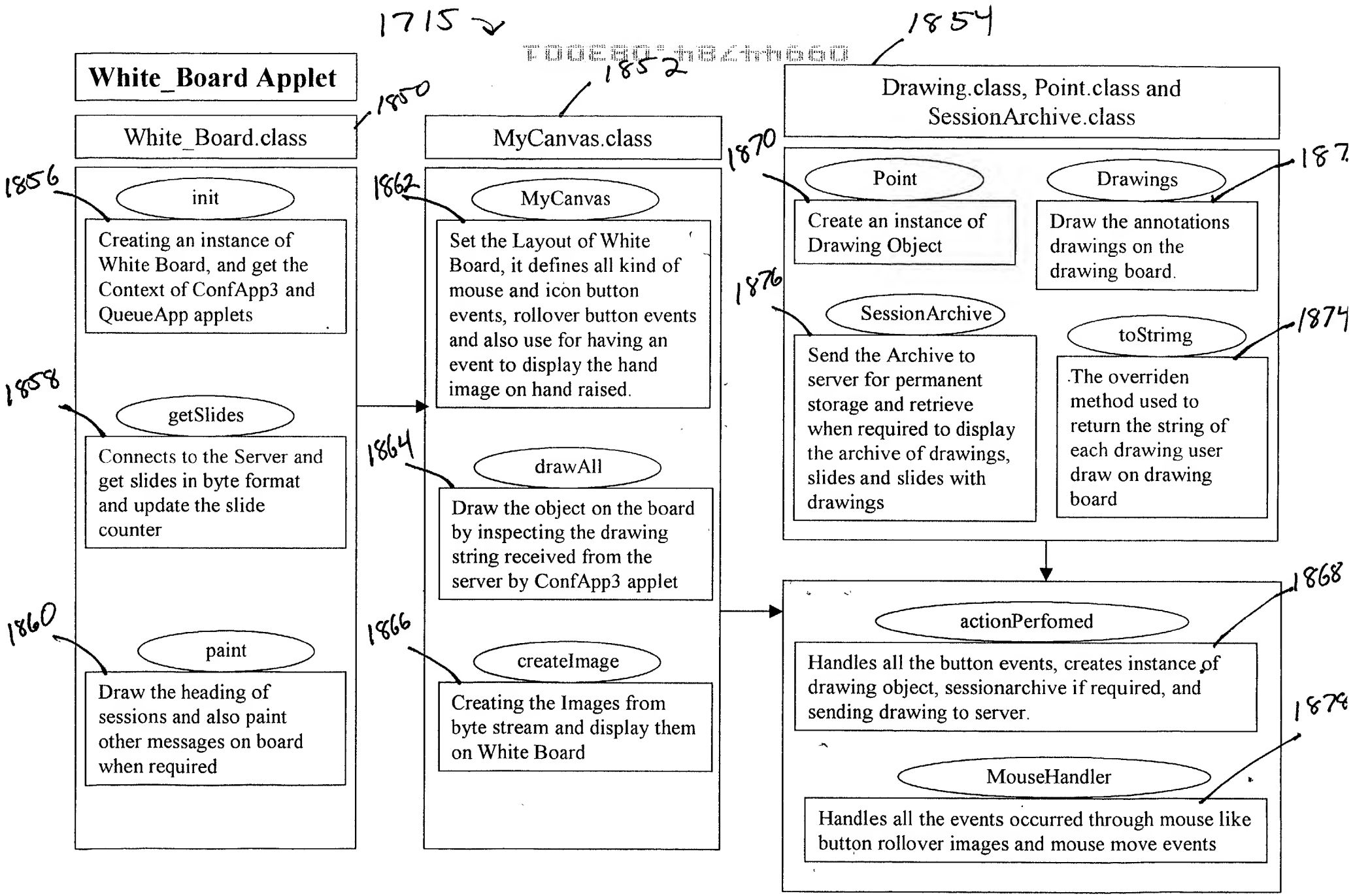
1715
1854
1852
1850
White_Board Applet
White_Board.class
MyCanvas.class
Drawing.class, Point.class and SessionArchive.class
1856
init
Creating an instance of White Board, and get the Context of ConfApp3 and QueueApp applets
1858
getSlides
Connects to the Server and get slides in byte format and update the slide counter
1860
paint
Draw the heading of sessions and also paint other messages on board when required
1862
MyCanvas
Set the Layout of White Board, it defines all kind of mouse and icon button events, rollover button events and also use for having an event to display the hand image on hand raised.
1864
drawAll
Draw the object on the board by inspecting the drawing string received from the server by ConfApp3 applet
1866
createImage
Creating the Images from byte stream and display them on White Board
1870
Point
Create an instance of Drawing Object
Drawings
Draw the annotations drawings on the drawing board.
1876
SessionArchive
Send the Archive to server for permanent storage and retrieve when required to display the archive of drawings, slides and slides with drawings
toStrimg
The overriden method used to return the string of each drawing user draw on drawing board
1868
actionPerfomed
Handles all the button events, creates instance of drawing object, sessionarchive if required, and sending drawing to server.
MouseHandler
Handles all the events occurred through mouse like button rollover images and mouse move events

Figure 18c

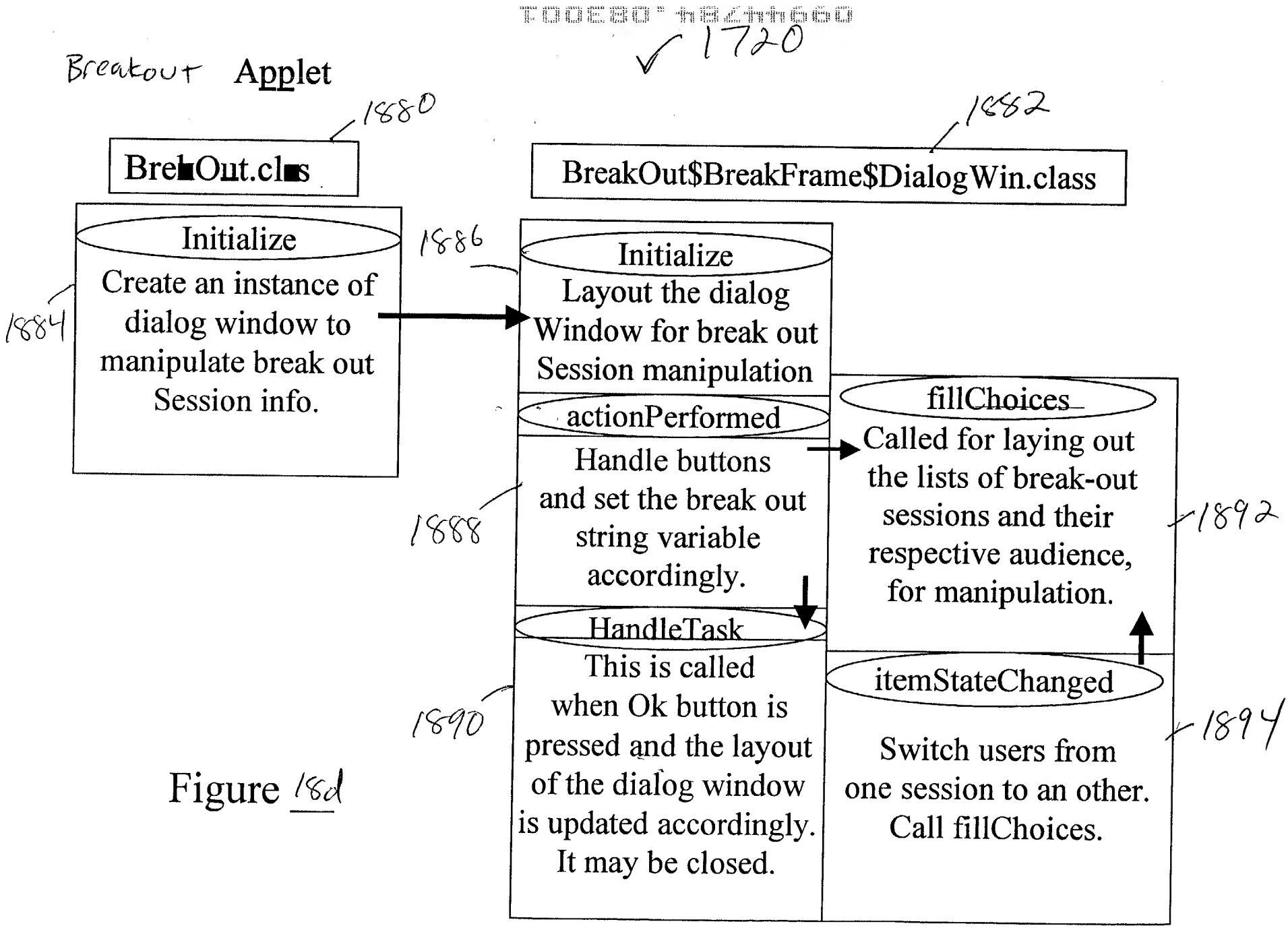
Breakout Applet
1720
1680
BreakOut.class
1682
BreakOut$BreakFrame$DialogWin.class
Initialize
Create an instance of dialog window to manipulate break out Session info.
1684
1686
Initialize
Layout the dialog Window for break out Session manipulation
actionPerformed
Handle buttons and set the break out string variable accordingly.
1688
HandleTask
This is called when Ok button is pressed and the layout of the dialog window is updated accordingly. It may be closed.
1690
fillChoices
Called for laying out the lists of break-out sessions and their respective audience, for manipulation.
1692
itemStateChanged
Switch users from one session to an other. Call fillChoices.
1694

Figure 18d

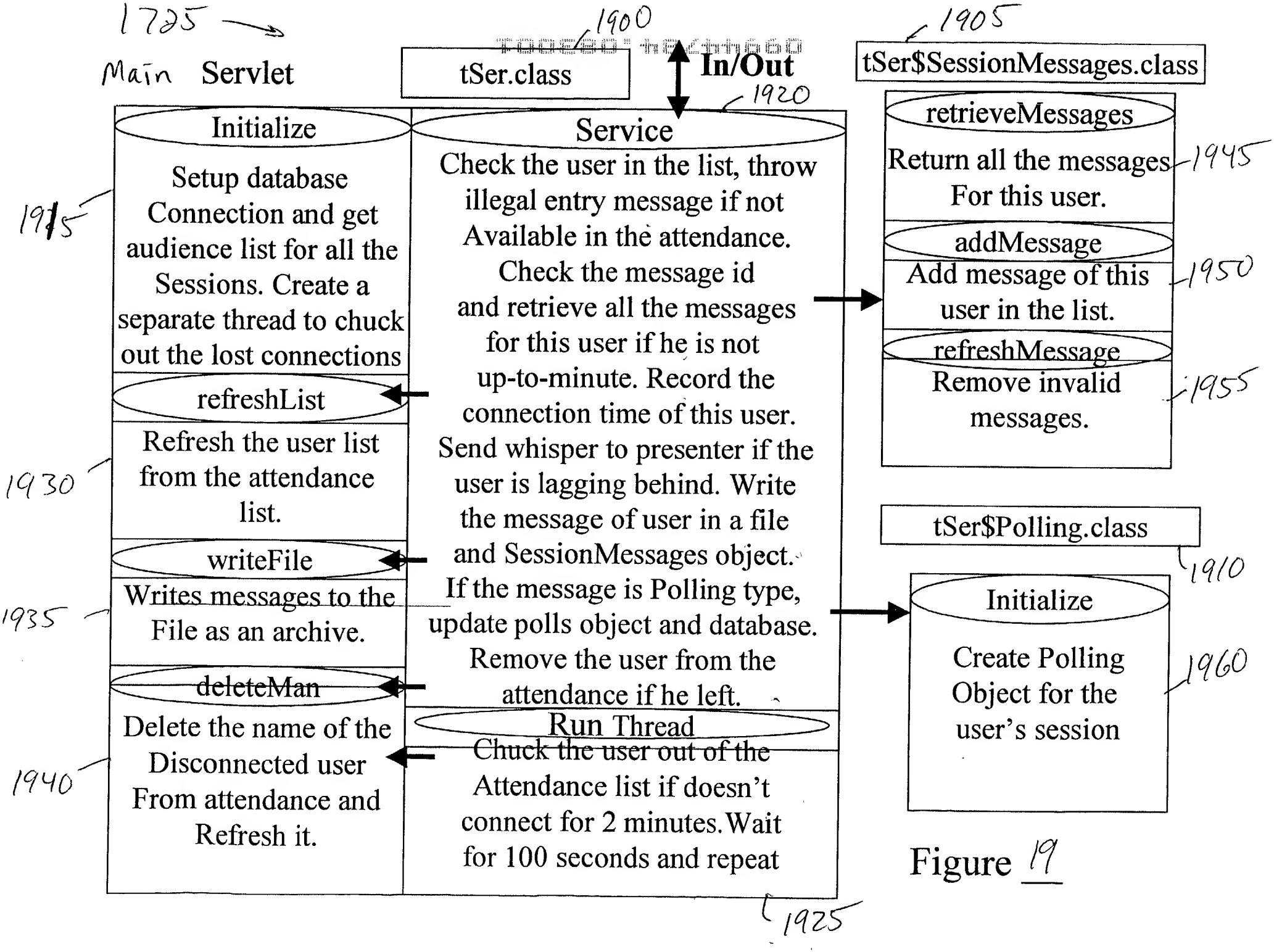
1725
Main Servlet
1900
tSer.class
In/Out
1905
tSer$SessionMessages.class
1920
Initialize
Setup database Connection and get audience list for all the Sessions. Create a separate thread to chuck out the lost connections
1915
refreshList
Refresh the user list from the attendance list.
1930
writeFile
Writes messages to the File as an archive.
1935
deleteMan
Delete the name of the Disconnected user From attendance and Refresh it.
1940
Service
Check the user in the list, throw illegal entry message if not Available in the attendance. Check the message id and retrieve all the messages for this user if he is not up-to-minute. Record the connection time of this user. Send whisper to presenter if the user is lagging behind. Write the message of user in a file and SessionMessages object. If the message is Polling type, update polls object and database. Remove the user from the attendance if he left.
Run Thread
Chuck the user out of the Attendance list if doesn't connect for 2 minutes. Wait for 100 seconds and repeat
1925
retrieveMessages
Return all the messages For this user.
1945
addMessage
Add message of this user in the list.
1950
refreshMessage
Remove invalid messages.
1955
tSer$Polling.class
1910
Initialize
Create Polling Object for the user's session
1960

Figure 19

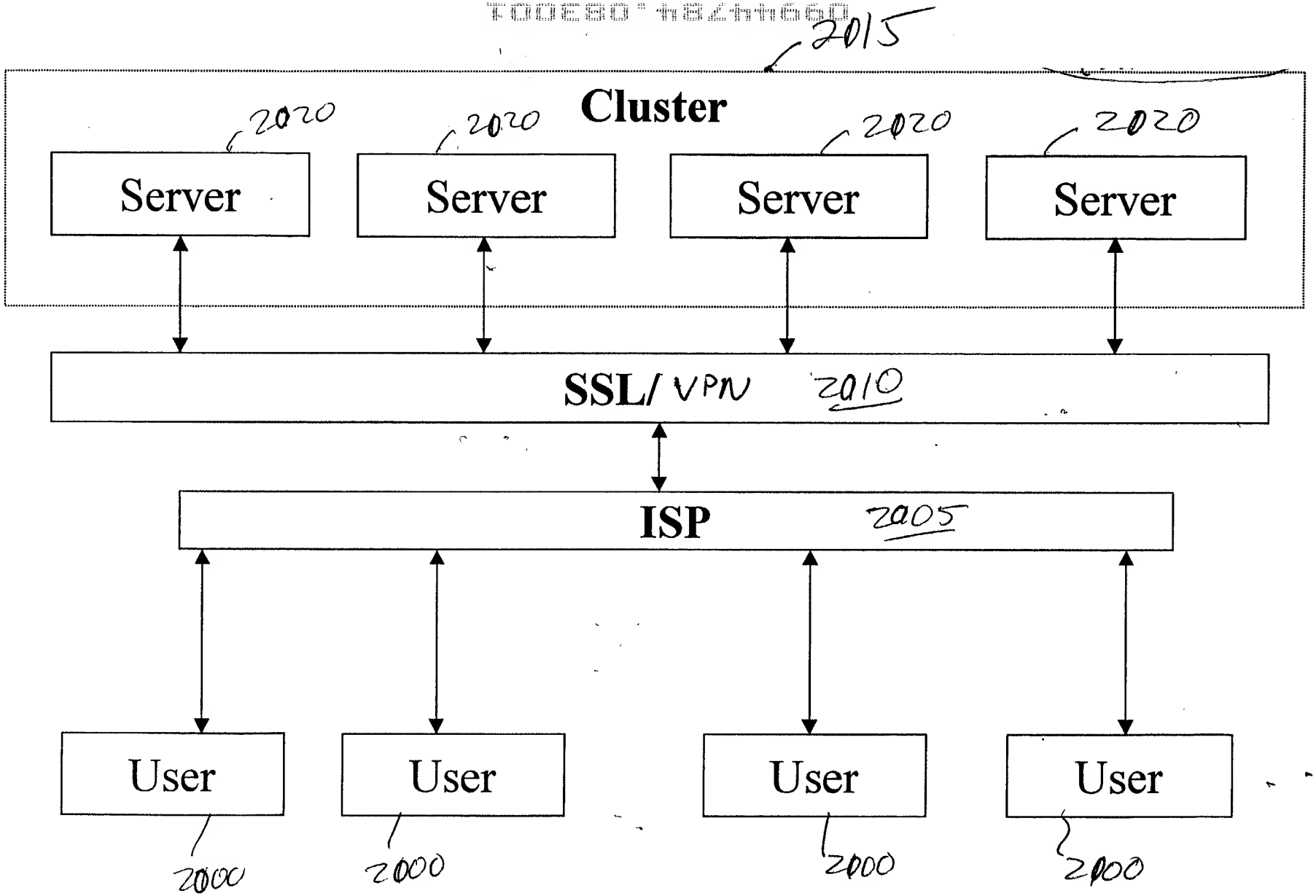
2015
Cluster
2020
Server
2020
Server
2020
Server
2020
Server
SSL/ VPN
2010
ISP
2005
User
User
User
User
2000
2000
2000
2000

Figure 20

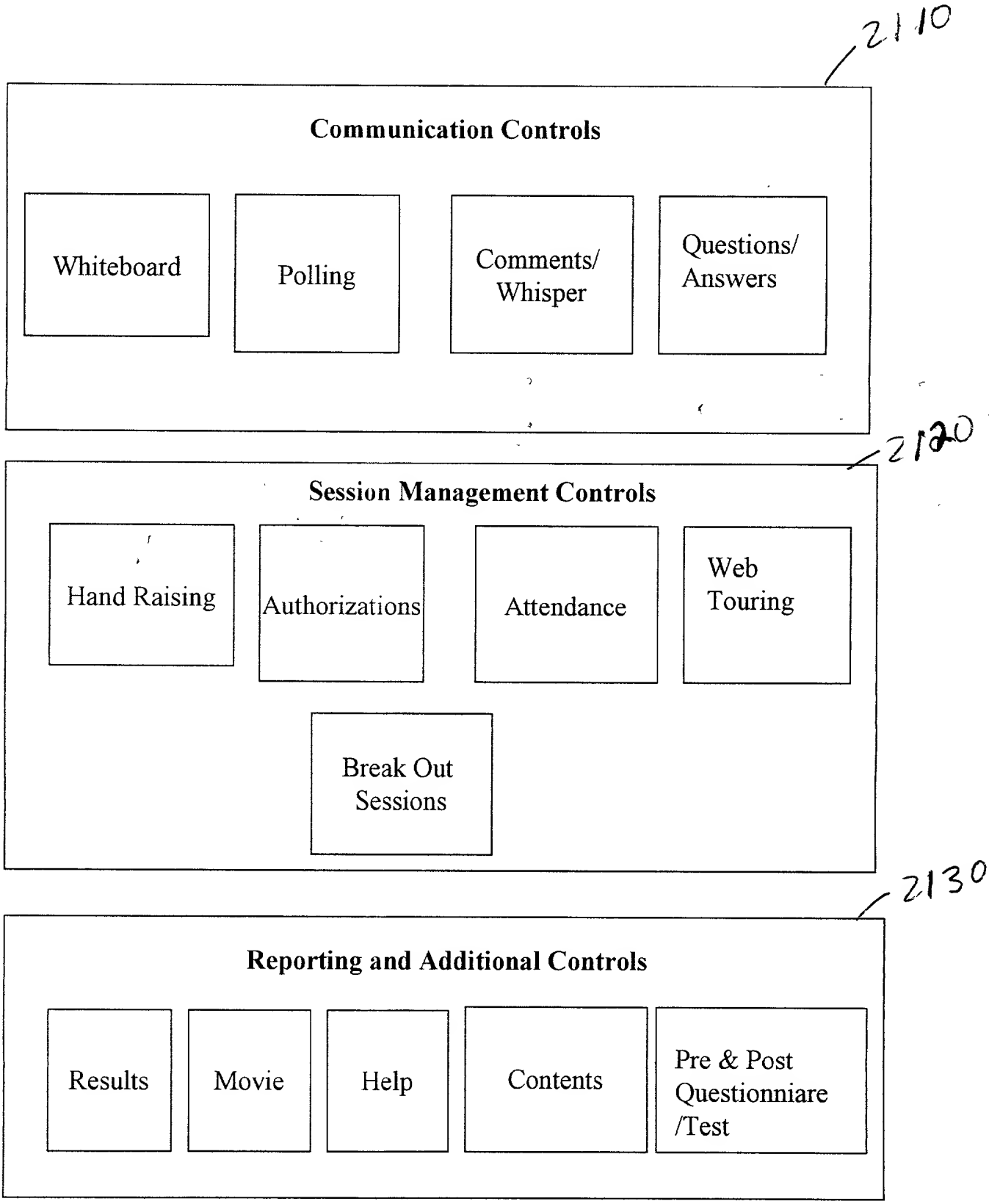
2110
Communication Controls
Whiteboard
Polling
Comments/ Whisper
Questions/ Answers
2120
Session Management Controls
Hand Raising
Authorizations
Attendance
Web Touring
Break Out Sessions
2130
Reporting and Additional Controls
Results
Movie
Help
Contents
Pre & Post Questionniare /Test

Figure 21

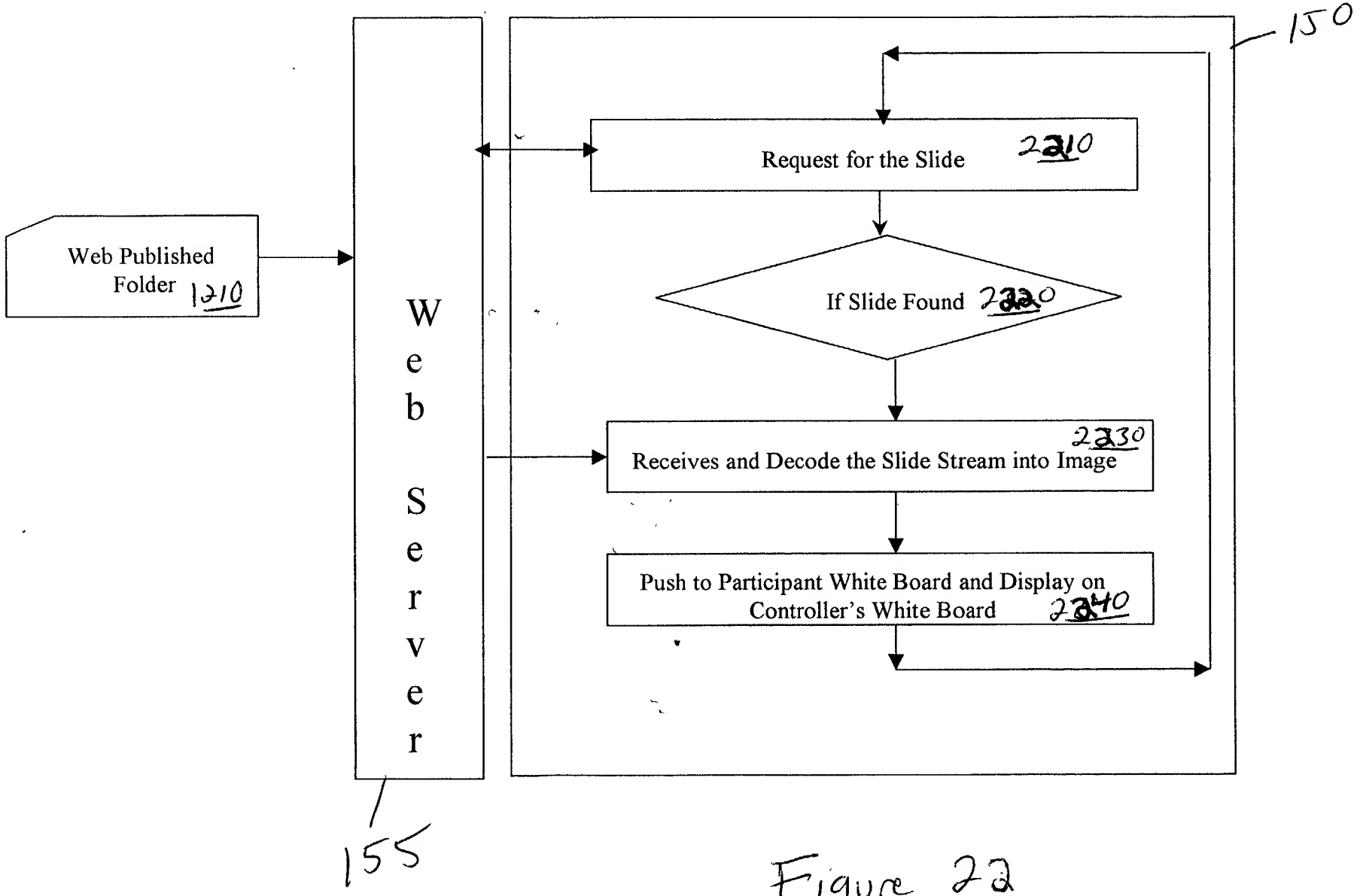
Web Published Folder 1210
Web Server
155
150
Request for the Slide 2210
If Slide Found 2220
Receives and Decode the Slide Stream into Image 2230
Push to Participant White Board and Display on Controller's White Board 2240

Figure 22